

1956



FLORIDA STATE BOARD OF HEALTH

1956

ANNUAL REPORT

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Annual Report

State Board of Health

State of Florida

1956

The following statistical reports will be published separately:
SUPPLEMENTAL I – FLORIDA VITAL STATISTICS, 1956
SUPPLEMENTAL II – FLORIDA MORBIDITY STATISTICS, 1956

WILSON T. SOWDER, M.D.
STATE HEALTH OFFICER
JACKSONVILLE, FLORIDA

The Honorable HERBERT L. BRYANS, M.D., President
Florida State Board of Health
Pensacola, Florida

Dear Dr. Bryans:

I herewith submit the annual report of the Florida
State Board of Health for the year ending December
31, 1956.

Sincerely yours,

WILSON T. SOWDER, M.D.
State Health Officer

May 1, 1957
Jacksonville, Florida

His Excellency, LEROY COLLINS
Governor of Florida
Tallahassee, Florida

Sir:

I beg to hand you herewith a report of the Florida
State Board of Health for the period January 1, 1956,
to December 31, 1956, inclusive.

Respectfully submitted,

HERBERT L. BRYANS, M.D.
President

May 1, 1957
Pensacola, Florida

Members of the
FLORIDA STATE BOARD OF HEALTH

HERBERT L. BRYANS, M.D., *President*
Pensacola

CHARLES J. COLLINS, M.D.
Orlando

T. M. CUMBIE, Ph. G.
Quincy

CARL C. MENDOZA, M.D.
Jacksonville

F. P. MEYER, SR., D.D.S.
St. Petersburg

OFFICIAL STAFF FLORIDA STATE BOARD OF HEALTH

December 31, 1956

DIRECTORS

State Health Officer.....Wilson T. Sowder, M.D., M.P.H.

Bureau of Finance and Accounts.....Fred B. Ragland, B.S.
Personnel Supervisor.....Paul T. Baker
Purchasing Agent.....G. Wilson Baltzell, B.S.

Bureau of Vital Statistics.....Everett H. Williams, Jr., M.S., Hyg.

Bureau of Local Health Service.....George A. Dame, M.D.
Division of Public Health Nursing.....Ruth E. Mettinger, R.N.
Field Advisory Staff and Field Training.....George A. Dame, M.D., Acting

Bureau of Preventable Diseases.....Clarence M. Sharp, M.D.
Division of Industrial Hygiene.....John M. McDonald, M.D.
Division of Tuberculosis Control.....Clarence M. Sharp, M.D.
Division of Venereal Disease Control.....John H. Ackerman, M.D., M.P.H.
Division of Veterinary Public Health.....James E. Scatterday, D.V.M., M.P.H.

Bureau of Special Health Services.....Lorenzo L. Parks, M.D., M.P.H.
Division of Hospitals and Nursing Homes.....Lorenzo L. Parks, M.D., M.P.H.
Acting
Division of Chronic Diseases.....Lorenzo L. Parks, M.D., M.P.H.
Acting
Division of Nutrition.....Lorenzo L. Parks, M.D., M.P.H.
Acting

Bureau of Laboratories.....Albert V. Hardy, M.D., Dr.P.H.
Miami Regional Laboratory.....Warren R. Hoffert, Ph.D.
Orlando Regional Laboratory.....Max T. Trainer, M.S.
Pensacola Regional Laboratory.....Emory D. Lord, Jr., B.S.
Tallahassee Regional Laboratory.....Robert A. Graves, M.S.
Tampa Regional Laboratory.....H. D. Venters, B.S.
West Palm Beach Regional Laboratory.....Lorraine Carson

Bureau of Maternal and Child Health.....Ralph W. McComas, M.D., M.P.H.

Bureau of Mental Health.....W. Laney Whitehurst M.D., M.P.H.

Bureau of Dental Health.....Floyd H. DeCamp, D.D.S.

Bureau of Entomology.....John A. Mulrennan, Sr., B.S.A.

Bureau of Sanitary Engineering.....David B. Lee, M.S., Engineering

Bureau of Narcotics.....Frank S. Castor, Ph.G.

Division of Health Information.....Elizabeth Reed, R.N., B.S.

COUNTY HEALTH OFFICERS

(As of December 31, 1956)

✓ Alachua	Edward G. Byrne, M.D., M.P.H.
✓ Baker-Nassau	Frank J. DiTraglia, M.D.
✓ Bay	Albert F. Ullman, M.D.
✓ Bradford-Clay-Unoin	A. Y. Covington, M.D., M.P.H.
✓ Brevard-Osceola	James F. Speers, M.D., M.P.H.
✓ Broward	Paul W. Hughes, M.D., M.P.H.
✓ Calhoun-Jackson	Henry I. Langston, M.D., M.P.H.
✓ Charlotte-DeSoto-Hardee	Joseph W. Lawrence, M.D.
✓ Citrus-Hernando-Levy	Harold F. Bonifield, M.D., M.P.H.
✓ Collier-Lee	Merwin E. Buchwald, M.D., M.P.H.
✓ Columbia-Gilchrist-Hamilton	Joseph C. Weeks, M.D.
✓ Dade	T. E. Cato, M.D., M.P.H.
✓ Dixie-Lafayette-Suwannee	Patrick H. Smith, M.D.
✓ Duval	Thomas E. Morgan, M.D., M.P.H.
✓ Escambia	John C. McSween, M.D.
✓ Flagler-Putnam	Norman B. Edgerton, M.D., M.P.H.
✓ Franklin-Gulf-Wakulla	Warren T. Weathington, M.D., M.P.H.
✓ Gadsden-Liberty	Wayne Yeager, M.D., M.P.H.
✓ Glades-Hendry-Highlands	Theodore W. Weeks, Jr., M.D.
✓ Hillsborough	Frank V. Chappell, M.D., M.P.H.
✓ Holmes-Walton-Washington	R. N. Nelson, M.D.
✓ Indian River-Martin-Okeechobee-St. Lucie	Neill D. Miller, M.D.
✓ Jefferson-Madison-Taylor	George A. Dame, M.D., Acting
✓ Lake	J. Basil Hall, M.D., M.P.H.
✓ Leon	Joseph M. Bistowish, M.D., M.P.H.
✓ Manatee	Charles W. Long, Jr., M.D.
✓ Marion	Luther A. Brendle, M.D., M.P.H.
✓ Monroe	Charles W. Morrison, M.D.
✓ Okaloosa-Santa Rosa	Edwin H. Miller, M.D.
✓ Orange	Wade N. Stephens, M.D., M.P.H.
✓ Palm Beach	C. L. Brumback, M.D., M.P.H.
✓ Pasco-Sumter	Leo L. Burger, M.D.
✓ Pinellas	Bertram R. Provost, M.D.
✓ Polk	Chester L. Nayfield, M.D., M.P.H.
✓ Sarasota	William L. Wright, M.D., M.P.H.
✓ Seminole	Terry Bird, M.D., M.P.H.
✓ Volusia	Robert D. Higgins, M.D., M.P.H.

FLORIDA STATE BOARD OF HEALTH

GOVERNOR OF FLORIDA

FIVE BOARD MEMBERS

STATE HEALTH OFFICER

DIVISION OF
HEALTH
INFORMATION

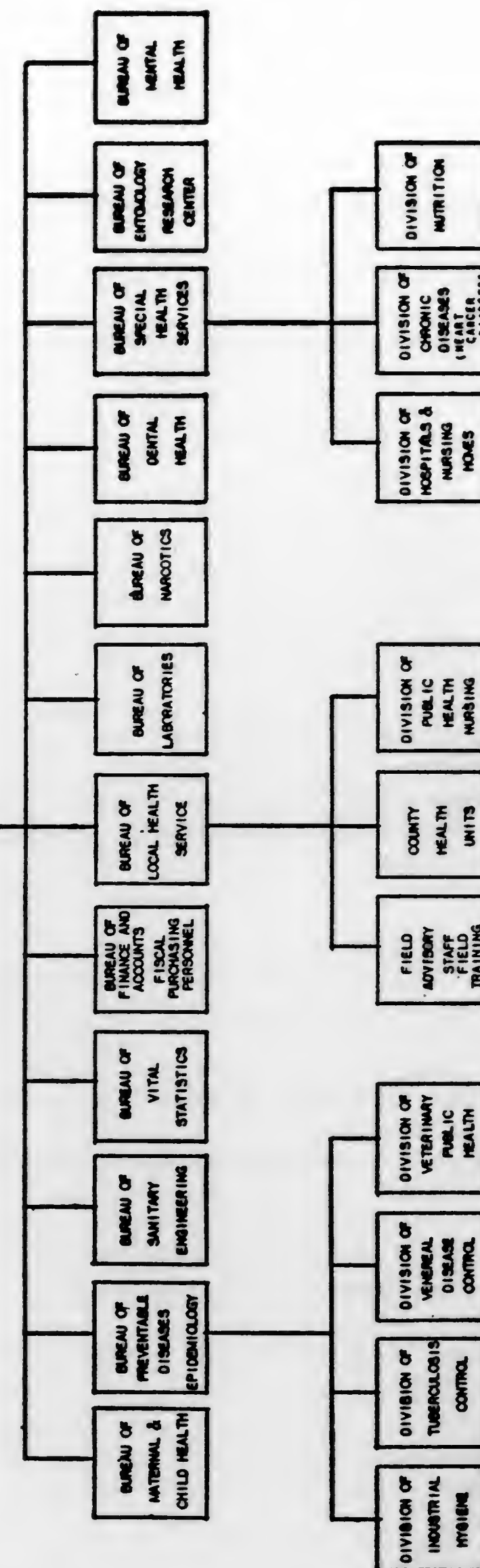


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GENERAL SUMMARY

WILSON T. SOWDER, M.D., M.P.H.,
State Health Officer

The year 1956 was one of reorganization and continued growth for the State Board of Health. For the purpose of effecting more logical units of administration, the responsibilities of two of the principal bureaus was redefined and a Bureau of Special Health Services was created. The Field Advisory Staff was returned to the Bureau of Local Health Service. The Bureau of Tuberculosis Control was combined with the Bureau of Preventable Diseases, with the Epidemiologist serving as Assistant Director. Included in this bureau are Epidemiology, the Divisions of Venereal Disease Control, Tuberculosis Control, Veterinary Public Health and Industrial Hygiene. The Bureau of Special Health Services includes the Divisions of Hospitals & Nursing Homes, Chronic Diseases, Nutrition and Civil Defense. The Division of Hospitals is charged with the responsibility of administering the new program, "Hospital Service for the Indigent," together with the licensure of hospitals and nursing homes.

The Bureau of Laboratories was reorganized to effect a cooperative program with the State Tuberculosis Board. Through this program the laboratories of the four State Tuberculosis Hospitals and the District Laboratories of the State Board of Health have been integrated and are operating under the supervision of the Director of the Bureau of Laboratories. Because of the growth and increasing importance of research in Florida's public health program, it was considered advisable to designate a coordinator of research. The Director of the Bureau of Laboratories was given this responsibility.

Under the authority of the 1955 Act creating the State Personnel Board, the Merit System Council employed the Public Administration Service of Chicago to prepare a classification plan and pay schedule for all state departments which would be included under the reorganized Merit System. The initial reclassification plan and pay schedule proposed by the Public Administration Service for the employees of the State Board of Health and the County Health Departments created many problems and adversely affected employee morale. A presentation of factual data pointing out the many injustices and problems that would be created by the adoption of these recommendations, may lead to a more satisfactory plan during the coming year.

The Hospital Service Plan for the Indigent sick created by the 1955 Legislature went into effect January 1, 1956. Because of the small initial state appropriation for the program, only 24 counties elected to establish a Hospital Care Program for their indigent under the provisions of the program. During the year, however, a special session of the Legislature authorized the State Welfare Department to establish a state-wide Hospital Care Program for public welfare

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recipients, and to administer the program under the provisions of the 1955 law creating "Hospital Service for the Indigent." Thus, the State Board of Health and its affiliated county health departments became responsible for the medical administration of the State Welfare Department's Hospital Care Program. This has made emergency hospital care available in all counties for that portion of our indigent population who are recipients of state welfare assistance.

The mental health program has been reorganized, strengthened and further developed. The training program of the Council on Training and Research in Mental Health was well utilized with the exception of funds available for internships in clinical psychology. The 14 child guidance and mental health clinics are inadequately staffed; however, they were strengthened to the extent possible from available funds. The number of rural counties served by full-time mental health workers grew to 13. Through a program developed with the State Hospital at Chattahoochee, county health officers and public health nurses have been making scheduled two-day visits to the State Hospital. During these visits they learn of the facilities of the hospital and how they may best help the professional staff of the hospital in preparing patients for admission and assisting discharged patients upon their return to the community.

During the year considerable time has been devoted to the development of a master plan to guide future construction of the Board's central headquarters in Jacksonville. Detailed architectural plans were prepared for the first unit of construction, which will be financed from \$450,000 appropriated by the 1955 Legislature for this purpose. Architecturally, this new unit will be a continuation of the district laboratory building completed in 1955. Plans were also developed for the construction of a district laboratory building in Orlando, to be financed from a \$75,000 state appropriation and a \$75,000 Federal Hill-Burton grant.

The construction of seven modern new health centers was completed during the year, all of which were financed from county and federal matching funds under the provisions of the Federal Hill-Burton Hospital and Health Center Construction Program. The significant acceleration in health center construction under the Hill-Burton Program can best be appreciated by comparing the five health centers completed during the entire previous eight years of the program with seven new projects completed this year and the 15 health centers and auxiliary health centers which were under construction or in the planning stage at the close of the year.

GENERAL SUMMARY 3

Projects Completed Prior to 1956

FACILITY	LOCATION	FEDERAL GRANT	TOTAL COST
Okaloosa Health Center	Crestview	\$ 24,930.32	\$ 38,354.34
Wakulla Health Center	Crawfordville	59,437.40	99,062.34
Holmes Health Center	Bonifay	26,387.51	40,596.17
Dade Health Clinic	Miami	16,666.53	47,618.65
Polk Health Center	Winter Haven	40,749.68	102,109.87
Total		\$ 168,171.44	\$ 327,741.37

Projects Completed During 1956

Broward Health Center	Ft. Lauderdale	43,076.92	123,678.77
Manatee Health Center	Bradenton	26,954.94	67,917.65
Alachua Health Center	Gainesville	102,000.00	185,454.55
Pahokee Health Center	Pahokee	8,945.30	25,558.00
Jackson Health Center	Marianna	56,875.00	87,500.00
Belle Glade Health Center	Belle Glade	11,093.87	31,696.76
Nassau Health Center	Fernandina Beach	23,824.58	52,943.52
Total		\$ 272,770.61	\$ 574,749.25

The fifteen projects which were under construction or in the planning stage at the close of the year represent a construction program totaling an estimated \$1,592,991.00.

Articles by the State Health Officer:

Sowder, W. T. and Rogers, W. D. Future of Mental Health in Florida. J. Florida M. A. 43:151-156, Aug. 1956.
Sowder, W. T. and Bond, J. O. Problems Associated with the Increasing Ratio of Male over Female Mortality. J. Am. Geriatrics Soc., 4:956-962, Oct. 1956.

SCHOLARSHIPS FOR PROFESSIONAL EDUCATION

The State Board of Health is now administering four distinct scholarship programs for professional education. Ten scholarships for the study of *medicine* are awarded each year upon the recommendation of a scholarship committee consisting of the deans of Florida's two medical schools and five physicians, designated by the President of the Florida Medical Association. Ten scholarships for the study of *dentistry* are awarded each year upon the advice of the State Board of Dental Examiners. Upon the recommendations of the Florida Council on Training and Research in *Mental Health*, scholarships, or stipends, may be awarded each year for the training of five residents in psychiatry, six interns in clinical psychology, five psychiatric nurses and thirteen psychiatric social workers. These three scholarship programs were created by the 1955 Legislature.

The fourth is an older program which was created with the passage of the Federal Social Security Act in 1935. Through this program federal funds are utilized to provide stipends to employees of the State Board of Health and its affiliated county health departments for *specialized professional training*. Great emphasis has been placed for many years on the training of the Board's permanent professional employees.

SCHOLARSHIPS AWARDED IN 1956

MEDICAL

Charles L. Anderson — Haines City	Marvin G. Mayo — Lynn Haven
William H. Hubbard — Jacksonville	Luther C. McRae, Jr. — Gainesville
James A. Johnson — Miami	Charles T. Ozaki — Belle Glade
Richard F. Kuhn — Miami	Hoke H. Shirley, Jr. — Pompano Beach
James M. Marlowe — Jacksonville	Arthur W. Sweat — Dunedin

DENTAL

William G. Boyd, Jr. — Jacksonville	Harry Gruen — Miami
George E. Carver — Live Oak	Wade B. Hammer — Lakeland
Thomas M. Darden — Miami	Henry J. Johnson — St. Petersburg
Joe H. Dowdy — High Springs	David C. McCoy — Pahokee
Alfred J. Phillips — St. Petersburg	Richard R. Souviron — Miami
Raymond E. Rogers — Pensacola	Donald Spence — Pensacola

NOTE: This includes two 1955 dental scholarships which were awarded in 1956.

MENTAL HEALTH

Residents in Psychiatry

Irwin S. Jacobs, M.D.
Raymond R. Killinger, Jr., M.D.
Morton S. Notarius, M.D.
Gregory G. Young, M.D.

Resident in Child Psychiatry

Ernest O. Herreid, Jr., M.D.

Psychiatric Nursing

Barbara J. Swain, R.N., Chattahoochee
Margaret Pearson, R.N. — Miami Nancy F. Dodge, R.N. — St. Petersburg

Psychiatric Social Work

Arthur W. Bothmann — St. Petersburg Naomi Knapper — Sarasota
Lillian Craig — Ruskin Donald E. Steiss — Tampa
David N. Hanson, Jr. — Ft. Lauderdale Martha Watkins — Sebring
Candace Keogh — Jacksonville

NOTE: No scholarships were awarded in 1956 to interns in clinical psychology.

PUBLIC HEALTH PERSONNEL

W. C. Ballard, M.D.	Health Officer	Pinellas County
John S. Neill, M.D.	Health Officer	Manatee County
Johnson L. Turnage, M.D.	Health Officer	Okaloosa-Santa Rosa
J. Dillard Workman, M.D.	Health Officer	Bur. of Local Health Service
Margaret Avant	Public Health Nurse	Hillsborough
Edna Dayson	Public Health Nurse	Dade
Mertie A. LeClaire	Public Health Nurse	Clay
Ophelia J. Wright	Public Health Nurse	Manatee
William H. Braatz	Sanitarian	Monroe
William J. Clarke	Sanitarian	Collier
Jerome N. Conger	Sanitarian	Palm Beach
Leon W. Sheumaker	Sanitarian	Leon
Mary E. Quaw	Health Educator	Bur. of Dental Health
William N. Beck, Jr.	Biologist	Bur. of Sanitary Eng.
Robert N. Thorner	Statistician	Bureau of Vital Statistics

ACTIVITIES OF THE BOARD

The Board re-elected Dr. Herbert L. Bryans as its President at the annual meeting in February. Six meetings were held during the year. The date and place of each meeting and the business transacted were as follows:

February 14 — Jacksonville

1. In connection with new law governing the State Merit System, the Board went on record urging the retention of existing sick leave policy, the privilege of fixing entrance salaries above the minimum where suitable persons cannot be found to accept positions at the minimum, and the retention of the privileges of giving salary increases in multiples of \$5.00 per month rather than having specific steps of a stipulated amount.
2. Adopted policy requiring new employees to have chest X-rays.
3. Adopted rules and regulations for the operation of the indigent hospitalization program.
4. Appointed Dr. J. A. Long of Palatka, negro physician, as consultant to the State Board of Health with the advisory committee on indigent hospitalization.
5. Adopted revised rules and regulations for the control of communicable diseases.
6. Approved the appointment of Dr. W. Laney Whitehurst as Director of the Bureau of Mental Health.
7. Agreed to waiving vital statistics fees for certain classes of applicants.
8. Amended the formula for allocating funds to county health departments.
9. Approved the sending of a telegram to certain congressmen urging the appropriation of funds for the National Institute of Dental Health.

April 8 — Vero Beach

1. Approved a reorganization of the State Board of Health creating a Bureau of Special Health Services and assigning divisions and programs between this new bureau and the Bureau of Preventable Diseases.
2. Approved the appointment of Dr. C. M. Sharp as Director of the Bureau of Preventable Diseases, and Dr. L. L. Parks as Director of the Bureau of Special Health Services.

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3. Approved certain persons for postgraduate training for the academic year 1956-1957.
4. Approved certain changes in the sanitary code.

May 13 - Miami Beach

1. Authorized the State Health Officer to expend \$4300 for costs involved in the closing of Second Street at the State Board of Health headquarters in Jacksonville.
2. Authorized the State Board of Health to purchase the Clark property and the Susie Hill property on the lot adjacent to the headquarters at the State Board of Health.
3. Made minor changes in the policy on fluoridation providing for the addition of somewhat less fluorides to public water supplies during the summer months than during the winter months.
4. Approved a letter presented by the State Health Officer which would be signed by the Health Officer and addressed to the Merit System Director urging certain changes in the proposed regulations of the Florida Merit System.
5. Agreed to accept the recommendations made by the Medical Scholarship Committee for the awarding of ten medical scholarships for the coming academic year 1956-1957.

August 5 - Jacksonville

1. Agreed to a transfer of the State Board of Health Building in Palm Beach County to the Board of County Commissioners of Palm Beach County with the understanding that a new building would be built by them for the County Health Department.
2. Received the State Auditor's report and discussed it with the State Health Officer and Director of Finance and Accounts.
3. Reaffirmed its previous stand protesting a proposed new Merit System regulation and authorized the State Health Officer to appeal to the personnel board if necessary.
4. Received a report from David Lee, Director of the Bureau of Sanitary Engineering, to the effect that plans are under way which will solve the water supply program in the Cocoa Beach area.
5. Approved proposed rules and regulations submitted by the State Barbers Commission.
6. Adopted certain revisions to the rules and regulations pertaining to the indigent hospitalization program.

GENERAL SUMMARY 7

7. Adopted a resolution authorizing the attorney to proceed with condemnation proceedings on property owned by Susie Hill near State Board of Health headquarters in Jacksonville.

September 30 - Jacksonville

1. Adopted a proposed budget for the biennium 1957-1959 after presentation by State Health Officer, Bureau and Division Directors.
2. Adopted revised rules and regulations on structural pest control.
3. Adopted an amendment to the rules and regulations pertaining to the indigent hospitalization program.
4. Authorized disposal of certain records in the Bureau of Finance and Accounts.
5. Approved the appointment of Dr. A. V. Hardy as Research Coordinator of the State Board of Health.

December 2 - Jacksonville

1. Approved 13 recommendations prepared by Bureau and Division Directors, County Health Officers, other staff members, and the State Health Officer, for submission to the Merit System Council. These recommendations urged certain changes to the proposals made by the Public Administration Service of Chicago.
2. Received a report from Miss Ruth Mettinger, Dr. R. W. McComas and Mrs. Ethel Kirkland, on the midwife program in the state and discussed the program.
3. Approved rules and regulations for beauty culture schools submitted by the State Board of Beauty Culture.
4. Approved certain changes in rules and regulations submitted by the Barbers Sanitary Commission.
5. Authorized the State Health Officer to purchase the Susie Hill property for \$7700.
6. Approved the abolition of the Field Advisory Staff and the transfer of the staff and functions to the Bureau of Local Health Services.

DIVISION OF HEALTH INFORMATION

ELIZABETH REED, R.N., B.S.,
Director

There appears to be a more intensified and mature approach to health education these days. The former is epitomized by the numerous requests for assistance with health education programs throughout the state, and for speakers on health subjects. Due to the size of the staff, only a small number of these requests can be met. However, six counties now employ health educators on the local level and this helps the situation somewhat. It is hoped that during the coming year one or two more county health departments will consider the employment of full-time health educators. District health educators to serve the smaller counties might also do much to relieve the problem.

The mature approach is felt in the more thoughtful requests for materials and a greater understanding of the tremendous role health education plays in public health programs, especially so in the chronic diseases which are receiving so much attention of late.

ART WORK

The staff artist completed the following: bulletin board displays, 4; charts, including large display sizes, 30; cover designs, 7; graphs, including poster sizes — both line and bar types, 14; illustrations, in five types of media, 40; layouts, 50; letterheads, 4; maps, 2; photo illustrations and cropping, 7.

At the request of Hillsborough County Health Department, full page layouts were planned for this county's annual report. These included tables, pie charts, bar graphs and a map.

AUDIO-VISUAL AIDS

In 1956 the Audio-Visual Aids Library again showed a marked increase over 1955 in all phases of activity, with the exception of total number of persons in combined audiences. This showed less than one per cent decrease. The greatest increase was reflected in the number of aids circulated, which amounted to 34 per cent. This, of course, is the true indication of the increased work load.

Number of bookings processed	3,875 — (8 per cent increase)
Number of times all aids were used	5,128 — (34 per cent increase)
Number of persons in combined audiences	662,092 — (Less than 1 per cent decrease)
Number of aids — no report received	151
Number of aids returned — Not used	474

There was an increase in the number of aids other than 16mm motion pictures that were circulated. Silent film-strips were used most frequently in this group.

Eleven films were booked for telecast use and a report was received on eight. The total combined estimated audiences for these were 1,915,000. Forty-four radio transcription discs were broadcast once each to a total combined estimated audience of 1,767,169. The number of discs used increased 38 per cent. One hundred and eleven 35mm tuberculosis x-ray trailers were booked. The library received a report on 65 which were shown approximately 1542 times to an estimated audience of 349,413. Estimated number of persons reached by all Audio-Visual aids totaled over 5 million.

Projection equipment loaned for use by persons outside the library totaled 335 pieces, an increase of 32 per cent. Requests for audio-visual aids were received from all 67 counties. Twelve prints of motion pictures were removed from the Library because they were either obsolete or damaged. Ten titles (15 prints) of motion pictures were placed on loan in the Library by other agencies. Three new pieces of projection equipment were acquired: projectograph, sound motion picture projector and slide projector.

During the year a new system of handling activity reports on films on loan to the Library from other agencies was established. Formerly, reports were given them once a month, now only three times a year.

A new method of posting and a new reporting form was devised to speed circulation. A full-time clerk was added to the staff. A new catalog was printed and distributed during the summer and fall months.

During the summer the Library inaugurated a system of distribution of discussion guides on a limited scale. This has proved most successful. It is felt that the use of these guides will enhance the effectiveness of the materials presented. . . . Much time is spent now by the librarian in helping individuals plan programs, make tape recordings, etc. . . . The Library was closed as usual during the month of July for cleaning, repairing, removing and processing of films.

EXHIBITS CONSULTANT

The exhibits consultant maintained a steady output of work during the year ranging from talks to groups on exhibits and layout, assistance with orientation programs, consultations regarding displays, photography and the completion of a series of slides on hookworms. He completed approximately *two hundred signs* from name plates to ten foot banners; nearly *one hundred* illustrations, posters, charts, etc.; and worked with the various bureaus, health departments and other agencies in putting on *twenty-five* exhibits throughout the state.

HEALTH NOTES

The number of people desiring to regularly receive *Florida Health Notes* continues to grow. The circulation list is approximately 14,000 now in spite of the fact that the mailing list was "cleared" in 1956 by the use of return post cards if the subscriber still wished to receive this publication. A 65 per cent return of these cards is another indication of interest, as were the more than 1500 comments received.

During 1956 the following subjects were treated in *Health Notes*: fluoridation; nursing homes; public health nuisances; health careers; hospital service for the poor; simplified annual report; Entomological Research Center, cancer, tuberculosis and clean water-clean air.

LIBRARY

BARBARA J. BECKNER, B.A., M.S.L.S.
Librarian

Circulation for 1956 was as follows: Books, regular loan, 1123; indefinite loan, 1552; periodicals, 6685; pamphlets and reprints, 233, making a total of 9593. The Library borrowed from the National Library of Medicine 16 microfilms and bought 21 photostats. Inter-library loans from other libraries were 43 and the Library loaned 30 items to other libraries.

A total of 1350 reference questions were answered and approximately 35 bibliographies were prepared. From October to December a record was kept of the reference work done for private physicians, State Board of Health and county health department employees and others. Under reference work taking 1-5 minutes the figures were: private physicians, 69; public health personnel, 197; others, 54. Reference work requiring more than five minutes to answer: private physicians, 26; public health personnel, 52; others, 32. This reveals that many people outside State Board of Health and county health department employees rely on this Library.

With the assistance of a part-time cataloger the Library was able to catch up with some of the backlog of books that had accumulated in the attic. By next year the Library hopes to be able to catalog all books within a week of their arrival. Books cataloged in 1956, 840; bound journals processed, 214; total volumes added, 1054; new pamphlets added, 508; total number of books and journals withdrawn, 320. The cataloger also cooperated with the Division of Heart Disease Control in setting up their Mobile Library of Books on the Heart.

The Library offered to the University of Florida and the University of Miami some journals to which it no longer subscribed. Since the Library is cramped for space it is glad to give them to libraries that can use them. Two hundred and seventy-seven items were shipped.

Special emphasis was placed this year on publicizing the Library's services. A new publication called *Recent and Readable* designed to stimulate interest in reading by State Board of Health and county health department employees was started. Recommendations by State Board of Health and county health department personnel of articles and books are listed each month. A short paragraph accompanies each recommendation telling why it is worth reading. Material about all fields of public health is included and the subject matter is varied from issue to issue.

A leaflet describing the Library's services was prepared and distributed to all county health departments. The Florida Medical Association mailed copies to their members. Copies were also sent to all hospital administrators. Quite a good response was received from physicians.

Since a great deal of material is sent through the mails the Library bought padded mailing envelopes which can be used several times for sending books and journals to out-of-town users. Return mailing labels are also sent with each package. This boosts circulation since people are more prone to borrow books if packaging and labeling for return are facilitated.

The Library received some additional funds for binding during 1956. It has the problem of more journals than money to bind them, with consequent loss of single issues.

PAMPHLETS

The requests for pamphlets constitute a never-ending stream. Approximately 200,000 were distributed in 1956. There are now six pamphlets in Spanish which are proving to be very popular in the southern part of the state.

There was an increase in the number of pamphlets requested on Accidental Poisoning. A new small flyer entitled, *When You Are Asked to Go to the Clinic - Please Do!*, proved to answer a need with over 10,000 distributed to county health departments. Other popular subjects were rabies, preparing your child for school, nutrition and mental health.

PRESS SECRETARY

During the year the press secretary wrote routine news releases which averaged more than one per week. These routine releases go to all papers in the state, and radio and TV stations. Some were originated by the secretary, others were assignments. Numerous special releases were written, often as many as three a day when a special meeting was in session, or for such events as special emphasis on polio immunization.

Every effort has been made to maintain good working relations with the press and wire services locally and throughout the state. This has

been done by cooperation with editors and reporters, assisting in covering meetings when asked and making every effort to secure information when requested. The State Board of Health has an excellent reputation newspaper-wise and enjoys unusually good press relations.

The press secretary has assisted in writing several issues of *Florida Health Notes*, with particular responsibility assigned for four issues. She was also responsible for the State Board of Health house organ, *The Intelligencer*, which comes out five times a year. In the field of photography, the press secretary took several hundred pictures for *Health Notes* and for news releases, exhibits, mats and pamphlets.

In addition to many small meetings and seminars, the press secretary handled publicity and pictures for seven larger meetings and conventions. These were Health Officers' Conference, Tri-State Obstetric-Pediatric seminar, Florida Heart Association, Florida State Pharmaceutical Association, Florida Public Health Association, Gastro-intestinal Diseases Seminar and Cardiovascular Diseases Seminar.

Other duties of the press secretary have included special work on talks, radio scripts, pamphlets and reports. Instruction on how to prepare news releases and on press relations have been given to groups attending orientation courses and sanitarian short courses.

OTHER ACTIVITIES

There was a surfeit of foreign visitors in 1956. There were 36 from 18 different countries who visited the central office, the county health departments, or both, for varying periods. The amount of time, energy and cost to the State Board of Health to handle this many visitors is incalculable.

Seven orientation programs were held of which three were for special groups. A total of 135 persons attended. This activity is one that consumes a great deal of time particularly in arranging the programs and caring for out-of-town visitors. . . . This division makes innumerable contacts with schools, particularly faculty groups in planning health education activities. . . . Liaison with voluntary health agencies is maintained. . . . Numerous invitations to professional meetings are received with at least one meeting non-attended for every one where a staff member is present. . . . Many talks and appearances were made by the director before community committees and civic groups.

Our greatest lacks remain the same: Use of TV and radio, and adequate office and storage space.

Articles by staff members:

Reed, Elizabeth. The Cobblers' Children. *Am. J. Nursing*, 56:895-96, July 1956

Reed, Elizabeth. "Grass Roots Approach". *Bull. Nat. Tuberculosis A.* 42:29-30, Feb. 1956

BUREAU OF LOCAL HEALTH SERVICE

GEORGE A. DAME, M.D.,
Director

There have been no significant changes in the organization of the county health units. There was a total of 1145 employees on the payrolls of the county health departments at the end of the calendar year. Generally, morale is high; however, the implications of the proposed changes in the Florida Merit System has caused considerable concern at all levels. On November 19-20 the directors of the county health departments met in Jacksonville to consider changes proposed by the Public Administration Service of Chicago and a series of recommendations and counter-proposals were submitted to the State Health Officer for presentation to the Merit System Council. Following this the Public Administration Service modified the proposed plan to meet some but not all of the recommendations of the State Board of Health.

There has been a considerable increase in funds available to county health departments. A total of \$5,116,117.00 was budgeted during the past year. County appropriations alone totaled \$3,377,339.00. The increasing willingness of county commissions and other local appropriating bodies to support the health departments is most heartening.

One of the outstanding accomplishments during the year has been the dedication of a number of new health department buildings and health centers. In addition, a number of other counties are engaged in the initial planning stages of still more facilities. This matter will be dealt with in detail under the reports from the several counties.

Training activities have been conducted at approximately the same level as the past years.

Dr. John W. McClane, Director of the Nassau-Baker County Health Unit, passed away on May 3, 1956. Dr. McClane had a long and successful career in public health, having served with the United States Public Health Service from 1932 until 1945, when he became director of the Nassau and Baker County Health Departments with headquarters at Fernandina Beach. Dr. McClane was born in Benkelman, Nebraska on September 2, 1889. He received his medical training at Loyola School of Medicine in Chicago. He was a member of the Florida Public Health Association, the American Public Health Association, the Florida Medical Association and the American Medical Association. At the time of his death he was Secretary-Treasurer of the Nassau County Medical Society, an office he had held since 1950.

The annual Health Officers Conference was held in Jacksonville

on February 13-14-15 and the following officers were elected for the coming year: Dr. Thomas E. Morgan, Chairman; Dr. William C. Ballard, Vice-Chairman; Dr. Henry I. Langston, Secretary. The following Chairmen of Committees were appointed: Dr. Edward G. Byrne, State-Local Relations; Dr. N. B. Edgerton, Preventable Diseases; Dr. Wayne Yeager, Maternal and Child Health; Dr. Joseph M. Bistowish, Records; Dr. Merwin E. Buchwald, Environmental Sanitation; Dr. R. N. Nelson, Public Health Nursing; Dr. J. Basil Hall, Special Health Services; Dr. John C. McSween, Mental Hygiene.

The following is a resume of some of the more interesting and significant developments reported by the county health departments. Unfortunately, lack of space does not permit a complete report.

Lee: Dr. Buchwald

"One of the most important accomplishments of the year in Lee County has been the beginning of construction of the City of Fort Myers sewer system and sewage treatment plant. Contracts amounting to \$1,700,000 were let in January and March. The treatment plant is scheduled to be completed in March 1957, and the collection system virtually completed by December 1957. Planning of the project was materially assisted by the Caloosahatchee River Pollution Survey carried out by the Lee County Health Department in 1953-54, during which a total of 264 samples were collected by health department sanitarians.

A Poison Control Center has been established at Lee Memorial Hospital in Fort Myers. The center is a cooperative effort on the part of local physicians, the hospital, the State Board of Health and the county health department. Public health nurses make follow-up field visits in all reported cases of accidental poisoning, in order to check for existing and potential hazards, and to give instructions on poisoning prevention."

Collier: Dr. Buchwald

"An increase of approximately 20 per cent in appropriations from the Collier County Board of Commissioners has permitted the employment of a part-time clerk and the leasing of additional space for the Naples branch office.

The Collier County Board of Commissioners has budgeted \$24,000 toward the construction of an auxiliary health center in Immokalee. The Florida Development Commission has recommended a grant of \$12,400 in Hill-Burton funds for the project, estimated to cost about \$35,000.

Collier County has received a special grant of \$12,200 per year for five years from the U.S. Children's Bureau, to carry out an im-

proved maternal and child health program for migrant agricultural workers in the Immokalee area. The project is designed to develop and evaluate new approaches to this serious problem. Funds are provided to employ one additional public health nurse and a part-time clerk, to employ private physicians for clinics, to pay the rent for a temporary health center building pending the construction of the new building, and to provide necessary transportation of patients to clinics. The consultant services of a nutritionist, health educator and a medical social worker will be shared with Palm Beach County. The Collier County project is part of a larger one which includes Palm Beach County and is under the over-all direction of the Bureau of Maternal and Child Health.

Another notable accomplishment has been the initiation of a mental health program. A well-trained psychiatric social worker has been employed as mental health worker with funds supplied by the Bureau of Mental Health. A very successful Mental Health Institute for Educators was held in November, and future institutes for parents and for educators are planned."

Volusia: Dr. Higgins

"A goal in public health nursing has been reached in a demonstration area in the Halifax area in regards to an integrated nursing service. Public health nursing services here include a bedside care program plus the activities of the generalized public health nursing program. This program, carried out by seven nurses, a senior nurse and supervisor, appears to be a rewarding work experience for the staff as well as avoiding duplication and a more economical service to the community.

Dr. Graham N. Charles, dentist in charge of the dental clinic for under-privileged children in Volusia County, has started work in the newly established clinic in Daytona Beach. Dental surveys and health education programs are included in this service.

During the past year the Mental Health Division has been cooperating with the United States Public Health Service in exploring (under Dr. William Hollister's direction) the possibilities of developing an effective epidemiological reporting procedure based on the Public Schools' Annual Report of Exceptional Children (Blue List). Out of this study, an IBM Card System may be developed to replace the Blue List and, in general, to provide an adequate instrument in a system of reporting incidence of mental illness in the community."

Broward: Dr. Hughes

Broward County has noted increased activity in providing sanitary sewer installations in several of the land developments in the county areas. The City of Ft. Lauderdale has approved a multi-

million dollar revenue bond issue for sanitary sewer facilities in two large areas. Closer cooperation between the health department and the county and city authorities has been achieved in approving proper sanitary waste facilities for new developments in critical areas.

The County Commission approved expenditures for the provision of a Mobile Health Unit. This unit, worth \$12,000 is a 40 foot clinic on wheels capable of serving as a small clinic building. It is air-conditioned, has its own electrical generator, heating equipment and radio-phone. All the western areas of the county will be served on schedule. It will also be available for special surveys and projects."

Seminole: Dr. Bird

"We were able to secure an increase of over 33 per cent in total funds from the County Commissioners. Because of this increase we have added a full-time public health nurse, a full-time sanitarian, and a part-time clerk, making a 50 per cent increase in our personnel."

Alachua: Dr. Byrne

"For the past year the Alachua County Health Department has been most proud of its new home—the Frank M. Hall Health Center, named in memory of the department's immediate past director. The building was occupied in May, 1956 and dedicated on June 24, 1956.

Other significant activities of the year include: (1) increased budget appropriations from the county which has enabled the department to increase the nursing, clerical, and sanitation staffs; (2) general increase in salaries; (3) the local Child Care Center law became effective; (4) extension of the city sewer lines to suburban areas; and (5) completed plans for special mental health classes for expectant mothers by the nursing staff."

Monroe: Dr. Hill

"In the early fall of 1955 a group of local citizens, acting as representatives of organizations within the community, met at the Sue M. Moore School to discuss the formation of a Health Council. As a result, early in 1956 the Marathon Health Council was organized. During the year, the council was active in the following projects: (1) Helped set up an adequate disaster medical unit to cover Marathon in case of hurricane, explosion, water contamination or epidemic. Working with the health council is the entire Marathon Ambulance Corps of trained personnel. (2) Helped form a health council in the colored area. Known as the Marathon Beach Subdivision Health Council, it has been active in removing health hazards from this section of town. (3) Worked with the Monroe County Society

for the Prevention of Cruelty to Animals; removed 28 stray female dogs. (4) Arrangements were made with a Homestead veterinarian to come to town, and with health council members assisting, all resident dogs were inoculated for rabies in August. (5) Worked with the Monroe County Health Department to remove open garbage pits; was active in securing a sanitary land fill through the Monroe County Commissioners. (6) Had mosquito breeding water holes filled by owners of the land. Overflowing cesspools have been drained and cleaned, clogged pipes cleaned and burning of garbage has been stopped."

Gulf: Dr. Weathington

"In Gulf County, under provisions of a special act of the 1955 Legislature, as approved by a county-wide referendum, the county appropriated \$45,000 for health center construction. Together with 50 per cent matching Hill-Burton funds, this will be used to construct, in Port St. Joe, 'The Albert L. Ward Memorial Health Center' at a cost not to exceed \$50,000, and in Wewahatchka, 'The Thomas Meriwether Memorial Health Center' at a cost not to exceed \$40,000."

Franklin: Dr. Weathington

The City of Apalachicola appropriated \$18,000 and the County Commissioners, \$6,000 and this, together with 65 per cent matching Hill-Burton funds, is to be used to construct a \$68,000 health center in Apalachicola. This center will house the seafood laboratory, as well as clinics and offices of the health department."

Flagler: Dr. Edgerton

"For the first time since the health unit was organized the mobile dental unit from the Bureau of Dental Health did extractions and fillings on indigent school children; volunteers screened eyes of all white school children; and the Country Club instituted a plan for dental bills for indigent children.

An increased appropriation by the County Commissioners enabled us to move into more convenient offices, and to employ our clerk full time rather than part time."

Sarasota: Dr. Wright

"The County Commission adopted a set of subdivision regulations. One of these regulations made it mandatory that all subdivision plats be submitted to the county health department for review and recommendations before the plat is submitted to the Commission for approval and recording. In going over these plats we cooperate very closely with the county road engineer in working out the drainage for the subdivisions. This contact with the subdivider has at least

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given us a chance to talk about public sewer systems, and in one instance, we have actually gotten a public sewer system and sewage plant built in a new subdivision.

Recently the County Commissioners amended the county building regulations so that the building department will not issue a building permit for any building or additions unless the health department has first approved the water supply and the sewage disposal."

St. Lucie: Dr. Miller

"We feel that a great advance has been made in St. Lucie County by the combining of the county health department and the city health department of Fort Pierce. By this procedure we have eliminated duplications of work and will be able to render the city all of those services available through the county health department more efficiently and at less cost to the city. This has brought the administration of public health activities in this county under the control of the Florida State Board of Health for the first time since the establishment of this unit. One of our first major steps was the enactment of up-to-date food and milk ordinances."

Indian River: Dr. Miller

"A new negro health center was opened in Gifford in September. This was made possible chiefly through the untiring efforts of our head nurse, Mrs. Alice Helleso. The use of the building was donated by a local citizen, and other local citizens, business people, and members of the Ministerial Association donated monies, furniture, equipment, and time to make this clinic possible. It is staffed by one of our public health nurses with local Red Cross aides assisting."

Walton: Dr. Nelson

"This health department has been instrumental in getting definite steps taken for sewer extensions and treatment plant for DeFuniak Springs in 1956. Sewer accommodations are limited and sewage has never had any type treatment.

We have about one-third of the county's entire population within the city limits. They were extended to take care of the area that had become thickly populated with residences and business establishments and to these areas, a safe public water supply has been extended."

Polk: Dr. Nayfield

"Much progress in public health has been made in Polk County in 1956: Construction was begun on the new Lakeland district of-

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fice which will be completed early in 1957. The Board of Public Instruction of Polk County signed an agreement to transfer the school nurses to the county health department and contribute financially to this program. A school health council was organized to be the advisory body for this program. An assistant health officer and a public health dentist were added to our staff as well as several nurses, one sanitarian and two clerks."

Baker and Nassau: Dr. DiTraglia

"In October, we instituted both in Nassau and Baker Counties a complete school health program. This was accomplished in cooperation with the Board of Public Instruction. In both counties we now have very active well baby clinics, maternity clinics and health instruction classes.

Another outstanding achievement in our counties has been the successful and well received mental health program.

The Fernandina Beach extension sewer lines and disposal plant is now an accomplished fact and plans for further extension are in progress.

Since October 1956 in our counties we have pooled all our personnel for the purpose of attending all civic meetings and have talked to these groups regarding public health programs. We found that this has afforded an opportunity to convey an idea of our work to the entire community."

Citrus: Dr. Bonifield

"The Health Department has continued its growth and effectiveness for a small county. Housing facilities for the department have been improved by a complete remodeling, including air conditioning. Health programs have continued and a successful mass TB survey was conducted with approximately one-half of the available population x-rayed.

Three major sanitation projects were started in 1956; however, only one was completed. A sludge drying bed in Crystal River was installed by the Council of the City of Crystal River. The Board of County Commissioners authorized a preliminary survey and study for a water district in the Homosassa River area. At present the survey has been completed and ways and means of financing are now being considered. Much work has been done in Inverness to arouse interest in the city fathers and the citizens to get action on the sewage condition in the city. The engineers' survey has been completed, and financing is now being studied for a sewerage treatment plant."

Pinellas: Dr. Provost

"The trend of public health was never more evident than when viewing the field of public health nursing and medical care in Pinellas County in 1956. A general medical clinic for colored indigents in the St. Petersburg area has been successfully operating since October 1955. This clinic is a result of the combined services of the welfare agency, hospital interne training program, and the health department-housing and nursing services being provided by the health department.

Arrangements and agreements were completed between Mound Park Hospital, County Welfare Department, and the health department for transfer of the maternity clinic from its location in the health department building in St. Petersburg to the Out-Patient Department of Mound Park Hospital. This clinic is staffed by public health nurses; Mound Park Hospital furnishes the housing, equipment and interne staff; County Welfare provides a social worker for screening of patients, drugs, and expense covering diagnostic service.

The service begun last year on follow-up of patients released from the mental hospitals has been met without encountering too much difficulty. Our public health nurses are endeavoring to prepare themselves for this program by participating in a nine-month in-service education program in mental health, one afternoon each month. They also sponsored a one-day seminar in September with a psychiatrist from Chattahoochee leading the discussion.

St. Petersburg is moving along rapidly in the construction of its \$14,000,000 sanitary sewerage system. Treasure Island, Long Key, Clearwater, and Cross State Development Company awarded large contracts for sanitary sewerage improvements. Safety Harbor, Kenneth City, and St. Petersburg placed new sewage treatment plants in operation.

The Pinellas County Commissioners placed in operation the first phase of a county garbage disposal program, a sanitary land fill in central Pinellas County.

Sixty members of the Pinellas County Dental Society volunteered their time to do the dental inspections on 19,041 elementary school children."

Hillsborough: Dr. Chappell

"For several years we have had numerous complaints from housewives and others about sour and off-flavor milk bought from grocery stores and particularly super-markets which have large milk cases. We worked constantly not only with the stores, but also with the dairies, to date their milk containers and see to it that milk was

not left in the store or restaurant longer than five days. We continued to receive complaints, with the stores and dairies blaming each other. In one month during the summer we found nearly 1000 cartons of milk from six to fourteen days old in the stores and the practice continued.

An ordinance was passed by the city in August 'requiring all bottles, cans, packages and other containers enclosing milk, buttermilk or other milk drinks, except when delivered to private residences, to be plainly labeled or marked with the date the milk was processed or pasteurized; prohibiting the sale of any milk, buttermilk or other milk drinks which are six days or more old from the date of processing or pasteurizing.' The date can be in code. The penalty for violation of this ordinance can be quite severe, depending upon the judge, and following one violation and conviction we had no further trouble during the year."

Jackson: Dr. Langston

"The staff of the Jackson County Health Department moved into new quarters in 1956. The new building costing \$87,500 was constructed under the Hill-Burton Act. It is located adjacent to the Jackson County Hospital in Marianna. The building was dedicated October 3 by Doctor W. T. Sowder, State Health Officer, U.S. Senator Spessard Holland, State Senator John Rawls and State Representative John Shipp. This is considered the most noteworthy achievement of the year.

Calhoun: Dr. Langston

"The contract for construction of new quarters for the Calhoun County Health Department was awarded Ralph E. Neel Construction Company of Bonifay, Florida, August 14, 1956. The new building containing 3,000 square feet floor space costing \$64,000 will be completed approximately March 1, 1957. The building is approximately 80 per cent complete at this time. It is located in the business district of Blountstown—just north of the Court House."

Palm Beach: Dr. Brumback

"During 1956 two much-needed public health centers were completed, one in Belle Glade and the other in Pahokee. These were constructed with the aid of Hill-Burton funds, and funds contributed by the cities and Palm Beach County.

A project for the study of health services to migratory agricultural workers was approved by the U.S. Children's Bureau. This study, being conducted under the supervision of the Bureau of Maternal and Child Health, includes migrant groups in Collier and Palm Beach Counties. The purpose of the study, which will be

conducted over a period of five years, is to find ways of providing more effective health services to migrants. A team will be used consisting of public health nurses, a health educator, a medical social worker, a nutritionist and a liaison worker.

The first year of a tuberculin testing program, conducted among children in the first grade and kindergarten, was completed in May, 1956. The second year of this program was started in the fall of 1956 and included not only kindergarten and first grade children, but also second graders who had negative tests during the first year."

Manatee: Dr. Long

"County health department staff members held a series of educational classes for Spanish-speaking migrant laborers. Lessons in health and sanitation were given by an interpreter with encouraging results. Several excellent new labor camps have recently been completed in the county and a more extensive educational program is being planned using a variety of visual aids.

A rabies control program was set up through the coordinated efforts of the County Impounding Officer, local veterinarians, and county health department personnel. Clinics were set up to aid in inoculating and licensing of all dogs who had been in the county over 30 days. Through the cooperation of the County Superintendent of Schools, schedules and notices were sent home with school children. WTRL, local radio station, gave free spot announcements.

What started as a small sanitation and intestinal parasite program, sponsored by the county health department has grown into a cooperative community project to improve housing, environmental sanitation and community welfare. A team composed of the director, health educator, a sanitarian, and a public health nurse initiated the project in the negro sections of Palmetto to combat insanitary conditions conducive to infection with intestinal parasites."

Clay: Dr. Covington

"(1) Secured increased appropriation from Clay County Commissioners which enabled us to employ an additional sanitarian and nurse, both badly needed for some time. (2) Through help of volunteer lay workers, a reference library consisting of several hundred volumes has been completed, including binding and indexing. Information on all subjects can now be readily located and utilized and is very helpful to our staff and others in the community. (3) an auxiliary nursing health center building, a project initiated by and built by labor, money and materials of the citizens of Middleburg and surrounding area, was finished and utilized to fullest extent by our health department this year. The nurse in that area

is assisted in clinics by a volunteer lay individual, and hundreds of citizens of all ages in the northwestern border of Clay County received services for the first time—a wonderful example of community effort."

Bradford: Dr. Covington

"(1) Was successful in having the outside of health center building completely repainted. This was badly needed after twelve years of use. (2) Present splendid relations between health department staff and the local physicians and community were augmented by the opening of the new Bradford County Hospital, the county's participation in the state indigent hospitalization program and the appointment of the health officer to the attending hospital staff by the request of local physicians.

Approximately 36 per cent of the population 0-19 years of age of the tri-county rural area consisting of Bradford, Clay and Union have received two or more doses of polio vaccine. This was due to the cooperative effort of the local physicians and the health department staff."

TABLE 1
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	233	270	61	149	236	1,153	14	1,408	58	198	18	0	470	195	125	158	101
2. Field and Office Visits	253	290	63	276	257	1,343	14	1,563	61	346	18	0	1,170	395	241	201	189
3. Hookworm Treatment Given	220	247	452	161	43	97	254	131	73	39	29	1,163	21	179	125	110	301
TYPE OF IMMUNIZATION																	
4. Smallpox	698	161	1,250	296	219	2,224	85	134	86	206	93	422	15,916	207	72	1,546	3,698
5. Diphtheria	1,540	350	2,355	686	665	2,604	147	188	145	232	334	2,307	9,995	454	241	3,394	5,125
6. Whooping Cough	1,356	350	2,373	686	637	2,559	150	158	141	208	290	2,307	9,992	300	237	3,246	4,153
7. Tetanus	1,990	350	3,291	801	675	3,640	159	236	363	254	334	2,877	10,124	520	378	4,155	6,021
8. Poliomyelitis	11,636	854	6,991	1,550	5,639	9,824	1,416	662	725	2,988	775	4,878	37,479	1,553	604	5,530	22,738
9. Typhoid	1,962	778	6,493	1,144	34	283	281	29	287	8	5	2,670	785	45	666	674	6,840
10. Rabies-Humans	12	0	0	1	0	8	0	0	0	0	0	3	4	0	0	12	0
11. Rabies-Animals	2,159	105	0	0	0	1	18	0	60	119	0	0	0	0	0	202	0
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	1,096	2	148	50	90	852	20	2	4	87	27	19	3,067	7	4	5,224	2,563
2. Not Infected	42	2	59	17	72	135	16	1	1	10	4	1	4,774	2	1	3,013	739
3. Treated in Clinic	870	4	87	33	57	751	1	1	1	14	4	47	1,741	5	4	2,210	1,321
4. Treated by Priv. Physician	0	0	0	0	3	0	1	0	0	4	5	0	0	1	2	36	4
5. Ret. to Treatment in this Clinic	95	0	1	12	4	17	1	3	0	5	0	15	157	1	2	224	65
6. Ret. to Treatment to Priv. Physician	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	4	0
7. Epidemiologic Treatment	192	0	17	1	11	43	0	0	0	15	1	0	564	1	7	832	817
8. Patients Interviewed	816	1	50	58	27	427	1	0	1	16	10	45	1,361	3	5	1,270	820
9. Contacts Obtained	360	1	68	47	42	160	1	0	0	5	5	15	1,820	6	1	1,814	953
10. ERF's Closed	428	1	106	21	105	325	0	1	0	48	14	17	2,503	6	5	2,311	1,090
11. Field and Office Visits	1,734	27	304	124	245	2,689	21	13	9	199	35	83	9,334	26	20	10,681	1,840
C. TUBERCULOSIS CONTROL																	
1. Admission to Service-Case Active	45	9	18	13	20	85	3	13	5	12	10	16	620	5	2	119	157
2. Adm. to Service-Case Inactive	76	4	115	44	46	238	14	5	11	13	12	27	780	2	4	297	284
3. Adm. to Service-Contacts & Suspects	239	33	163	139	98	563	39	19	58	43	86	66	4,640	15	16	472	740

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	14	4	319	92	4	31	0	274	1	33	139	1,252	8	24	88	183	6
2. Field and Office Visits	25	5	319	122	6	48	0	280	12	34	181	1,646	9	31	75	157	6
3. Hookworm Treatments Given	3	100	79	265	15	276	767	257	12	164	31	476	435	26	206	90	46
TYPE OF IMMUNIZATION																	
4. Smallpox	106	316	1,888	18	14	308	73	140	40	177	127	4,157	172	235	387	441	53
5. Diphtheria	143	241	2,110	195	78	376	400	410	170	136	701	4,835	949	549	2,236	597	108
6. Whooping Cough	149	229	2,110	195	77	376	400	306	167	103	681	3,159	804	556	1,315	531	108
7. Tetanus	208	662	3,946	437	85	618	1,020	454	178	309	790	5,307	1,024	667	3,679	914	154
8. Poliomyelitis	445	1,209	5,447	452	35	1,710	1,034	1,141	292	987	1,656	17,067	2,071	3,036	6,915	848	389
9. Typhoid	21	864	2,332	85	5	951	122	41	16	136	123	243	188	248	2,132	53	87
10. Rabies-Humans	0	0	2	0	1	0	28	0	0	0	1	1	0	0	0	0	2
11. Rabies-Animals	0	0	133	0	37	0	0	0	0	0	0	0	0	0	0	315	5
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	17	16	285	1	0	26	39	43	13	11	85	2,008	7	58	74	105	7
2. Not Infected	0	2	104	0	0	2	0	2	4	3	70	1,617	0	1	0	5	2
3. Treated in Clinic	15	9	180	2	0	20	72	11	8	5	68	1,063	5	48	74	47	2
4. Treated by Priv. Physician	0	2	1	0	0	0	0	0	0	0	0	3	7	0	2	5	1
5. Ret. to Treatment in this Clinic	1	0	25	0	0	5	10	0	0	0	5	71	0	13	0	0	0
6. Ret. to Treatment to Private Physician	0	0	0	0	0	1	0	0	0	0	0	3	2	0	0	0	0
7. Epidemiologic Treatment	0	1	59	0	0	0	2	1	0	0	19	276	0	9	8	26	0
8. Patients Interviewed	9	6	56	2	0	4	11	19	5	3	56	1,538	6	56	65	51	0
9. Contacts Obtained	7	1	51	0	0	1	0	10	2	3	43	1,397	2	34	27	47	0
10. ERF's Closed	0	5	86	0	0	1	9	9	5	2	38	1,584	2	16	16	54	5
11. Field and Office Visits	23	35	547	2	0	34	95	40	15	18	110	8,839	9	112	228	191	34
C. TUBERCULOSIS CONTROL																	
1. Admission to Service-Case Active	2	8	16	0	3	7	13	11	7	4	13	324	4	8	36	5	3
2. Adm. to Service-Case Inactive	3	10	36	8	4	12	6	8	5	6	29	693	9	38	88	12	0
3. Adm. to Service-Contacts & Suspects	11	28	209	13	6	49	9	79	13	13	136	3,345	54	31	58	18	9

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	119	159	243	75	6	257	358	450	69	329	320	83	13	383	8	320	407
2. Field and Office Visits	249	211	348	77	10	276	540	561	84	400	578	89	13	579	12	585	673
3. Hookworm Treatments Given	79	89	182	96	353	126	262	171	4	9	444	152	9	319	171	40	509
TYPE OF IMMUNIZATION																	
4. Snailpox	35	921	1,325	98	49	186	607	613	361	595	1,134	587	1	5,215	124	3,999	92
5. Diphtheria	176	1,198	859	332	176	771	809	249	731	510	3,237	2,169	12	5,104	221	4,757	192
6. Whooping Cough	176	547	859	330	175	584	723	251	521	483	3,241	1,788	12	4,125	201	3,736	179
7. Tetanus	176	1,613	2,156	889	243	842	1,057	359	845	811	3,282	2,706	13	6,411	232	7,962	192
8. Poliomyelitis	2,763	2,328	5,221	1,947	725	1,178	6,107	4,122	2,012	3,010	2,286	13,458	276	12,189	1,972	10,369	4,141
9. Typhoid	11	790	1,626	467	238	884	173	3,392	423	916	3,985	935	3	3,624	64	757	124
10. Rabies-Humans	0	0	3	1	0	0	0	0	0	14	2	0	0	0	0	0	2
11. Rabies-Animals	0	0	0	0	0	0	0	0	0	185	175	0	125	0	0	0	978
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	17	199	1,992	80	2	30	484	730	26	154	9	121	14	261	53	831	111
2. Not Infected	3	36	132	44	0	0	138	177	0	36	0	1	13	61	8	75	69
3. Treated in Clinic	5	138	1,153	11	2	21	195	417	22	54	3	120	13	141	36	571	23
4. Treated by Priv. Physician	6	1	0	0	0	0	0	3	0	1	3	2	0	0	1	4	10
5. Ret. to Treatment in this Clinic	0	9	95	0	0	2	87	16	5	5	2	10	0	4	5	66	0
6. Ret. to Treatment to Priv. Physician	3	0	0	0	0	0	1	1	0	1	0	1	0	1	0	5	0
7. Epidemiologic Treatment	0	18	329	12	0	13	34	70	1	58	0	33	3	25	8	187	7
8. Patients Interviewed	0	86	93	9	1	31	70	608	22	108	12	101	4	63	30	271	71
9. Contacts Obtained	0	101	157	7	0	16	83	329	17	39	0	66	4	81	24	328	14
10. ERFs Closed	13	145	260	18	0	21	191	430	15	51	6	53	3	280	14	704	39
11. Field and Office Visits	37	373	3,502	99	1	60	902	1,826	53	500	32	131	28	1,153	89	2,233	170
C. TUBERCULOSIS CONTROL																	
1. Admissions to Service-Case Active	37	24	43	9	1	10	44	15	11	24	13	9	3	260	13	173	31
2. Adm. to Service-Case Inactive	59	42	100	15	4	24	45	56	7	17	34	13	6	535	15	309	27
3. Adm. to Service-Contacts & Suspects	167	179	240	65	23	144	89	85	8	73	138	128	52	829	36	1,063	194

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1956
A. COMMUNICABLE DISEASE CONTROL																
1. Admissions to Service	287	270	9	6	40	105	67	687	10	67	51	158	77	345	1	13,057
2. Field and Office Visits	508	364	24	18	54	147	130	702	11	105	55	301	84	345	1	17,798
3. Hookworm Treatments Given	224	486	37	1	146	43	113	125	93	186	64	61	40	532	212	12,271
TYPE OF IMMUNIZATION																
4. Snailpox	1,070	2,529	338	33	40	459	210	259	63	428	78	682	51	841	183	59,169
5. Diphtheria	1,825	3,673	1,185	90	738	542	313	333	406	499	189	617	336	1,179	551	78,975
6. Whooping Cough	1,807	3,568	924	87	666	534	313	296	380	424	96	548	337	1,141	555	70,016
7. Tetanus	1,875	3,809	1,471	159	947	630	374	333	434	699	200	873	403	1,385	847	100,548
8. Poliomyelitis	30,252	22,491	2,856	732	4,635	70	4,246	1,190	2,247	1,143	613	13,830	744	4,344	2,534	328,567
9. Typhoid	121	272	215	48	262	52	45	63	302	534	148	308	398	62	71	50,942
10. Rabies-Humans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	117
11. Rabies-Animals	5	0	0	0	0	0	0	264	0	0	0	0	0	0	0	4,887
B. VENEREAL DISEASE CONTROL																
1. Admissions to Service	1,329	837	64	228	55	473	274	79	39	35	3	103	44	26	22	24,782
2. Not Infected	444	148	0	0	27	245	49	16	7	2	0	17	1	0	0	12,436
3. Treated in Clinic	469	462	61	227	27	226	163	47	50	20	4	58	29	22	28	13,605
4. Treated by Priv. Physician	109	20	0	0	1	6	9	4	0	3	0	2	0	0	0	276
5. Ret. to Treatment in this Clinic	14	57	2	2	17	0	6	5	2	0	0	6	2	1	1	1,153
6. Ret. to Treatment to Priv. Physician	14	3	0	0	0	0	0	0	1	0	0	1	0	0	0	46
7. Epidemiologic Treatment	103	134	1	1	8	7	43	7	1	12	0	8	20	9	5	4,054
8. Patients Interviewed	139	212	16	203	22	232	64	42	7	14	30	106	17	18	13	9,498
9. Contacts Obtained	150	373	4	22	23	114	111	28	5	28	0	50	7	13	14	9,126
10. ERFs Closed	974	695	3	348	21	44	270	23	2	16	0	130	16	17	4	13,276
11. Field and Office Visits	5,384	2,628	73	348	79	673	836	120	73	93	16	480	54	55	38	59,853
C. TUBERCULOSIS CONTROL																
1. Admission to Service-Case Active	125	143	10	9	9	49	25	3	14	15	4	92	0	9	2	2,845
2. Adm. to Service-Case Inactive	304	132	31	22	13	63	28	9	20	26	2	192	11	41	2	5,143
3. Adm. to Service-Contacts & Suspects	1,320	288	45	75	42	169	148	46	174	24	12	376	51	35	1	17,829

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
4. No. of Persons X-rayed— Miniature Films	21,118	1	0	2,355	13,381	29,409	0	1,543	1,925	2,784	0	3,187	20,248	0	0	0	12,085
5. No. of Persons X-rayed— Large Films	850	54	626	374	1,066	1,070	94	84	52	82	72	102	5,308	50	34	1,989	1,347
6. Tuberculin Test	146	8	134	53	89	661	3	119	49	18	9	67	894	7	28	380	270
7. Field Visits	581	103	96	339	170	2,573	98	119	49	169	112	204	3,232	33	43	1,715	2,409
8. Office Visits	44	42	359	105	272	1,267	13	87	41	59	4	121	15,496	27	97	2,679	547
9. Cases Hospitalized	26	4	14	10	13	58	1	9	3	3	4	10	634	6	2	31	62
D. MATERNITY SERVICE																	
1.-2. Patients Admitted to Maternity Medical Service	464	56	182	104	245	360	21	2	14	95	39	243	3,603	0	49	51	540
3. Visits by Antepartum Cases to Medical Conferences	927	76	525	224	624	729	24	3	25	248	55	256	12,222	0	123	150	800
4. Patients Admitted to Maternity Nursing Service	481	77	161	117	288	355	31	16	47	123	76	316	4,049	0	46	435	659
5. Field Nursing Visits	1,124	166	206	575	510	631	27	18	58	351	46	563	10,013	0	63	723	1,465
6. Office Nursing Visits	1,707	6	581	77	766	1,691	39	19	27	290	203	391	10,418	0	176	236	1,822
7. Patients given Postpartum Medical Examination	172	6	26	2	43	138	0	0	0	7	9	30	957	0	17	7	147
8. Number of Midwife Meetings	6	4	0	0	0	18	3	0	2	3	0	10	10	0	0	1	1
9. Visits for Midwife Supervision	20	31	6	46	38	88	8	3	16	20	9	58	127	0	52	3	57
10. No. of Midwife Deliveries Supervised by health dept. personnel	2	0	0	0	0	26	0	0	0	1	0	0	0	0	0	0	2
11. No. of Individuals Enrolled in Classes for Expectant Mothers	297	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	134
E. CHILD HEALTH SERVICES																	
2.-3. Adm. to Well Child Medical Service—Infants	993	65	89	95	85	515	17	4	7	64	11	66	4,923	1	46	468	331
1.-b. Adm. to Well Child Medical Service—1-4	224	302	15	112	9	15	12	2	7	51	3	63	1,916	0	29	274	2
1.-c. Adm. to Well Child Medical Service—5 over	325	480	3	124	3	4	57	8	0	218	3	45	537	5	115	91	4
4. Visits to Well Child Medical Conference: Infants	1,290	159	182	165	94	1,329	17	6	8	113	13	85	9,171	1	55	820	882
1-4	349	802	23	152	17	37	12	2	8	80	4	65	7,563	0	36	402	3
5-over	627	1,437	8	231	3	6	60	8	0	223	3	47	1,797	5	125	139	4

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
4. No. of Persons X-rayed— Miniature Films	1,071	1,421	7,432	465	1	3,270	1,659	20	0	2,254	0	88,013	0	3,717	0	1,912	0
5. No. of Persons X-rayed— Large Films	75	77	205	12	28	115	76	84	37	59	127	1,304	165	151	245	40	20
6. Tuberculin Test	20	40	567	16	16	322	32	307	41	24	505	711	19	24	59	348	4
7. Field Visits	14	68	258	18	1	151	67	102	30	41	185	3,435	142	165	228	42	21
8. Office Visits	2	4	14	0	1	6	7	8	4	3	22	3,979	102	40	105	36	15
9. Cases Hospitalized												76	4	4	23	5	3
D. MATERNITY SERVICE																	
1.-2. Patients Admitted to Maternity Medical Service	85	8	402	7	11	17	68	44	49	29	19	1,716	28	0	255	46	14
3. Visits by Antepartum Cases to Medical Conferences	124	23	878	18	28	23	92	118	125	47	35	6,162	59	0	214	125	23
4. Patients Admitted to Maternity Nursing Service	37	11	631	26	2	23	107	46	1	22	7	2,147	33	95	594	61	16
5. Field Nursing Visits	41	8	565	217	2	52	305	92	0	66	7	4,107	44	171	884	62	21
6. Office Nursing Visits	145	19	1,013	12	1	27	311	152	4	50	2	7,950	68	141	990	172	24
7. Patients given Postpartum Medical Examinations	3	0	75	3	0	4	25	19	0	12	0	794	9	7	58	7	0
8. Number of Midwife Meetings	9	0	10	0	0	0	5	0	0	2	10	29	1	0	17	3	5
9. Visits for Midwife Supervision	3	1	147	0	0	14	22	7	2	5	0	0	22	20	178	17	0
10. No. of Midwife Deliveries Supervised by health dept. personnel	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	5
11. No. of Individuals Enrolled in Classes for Expectant Mothers	40	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0	0
E. CHILD HEALTH SERVICES																	
2.-3. Adm. to Well Child Medical Service—Infants	137	4	153	0	1	8	9	17	12	22	24	2,345	104	0	35	49	8
1.-b. Adm. to Well Child Medical Service—1-4	69	5	84	0	0	8	9	0	9	2	18	3,864	42	0	4	8	5
1.-c. Adm. to Well Child Medical Service—5 over	8	4	235	0	0	5	0	2	3	0	4	3,411	2	0	73	1	4
4. Visits to Well Child Medical Conference: Infants	167	6	203	0	1	11	9	23	19	22	24	4,998	156	0	40	84	12
1-4	106	7	111	0	0	8	3	0	13	7	19	8,737	57	0	5	8	8
5-over	19	4	240	0	0	6	0	2	7	0	4	6,491	3	0	73	1	7

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
4. No. of Persons X-rayed— Miniature Films	3,800	0	29,755	2,218	422	3,220	12,852	750	0	3,039	6,175	4,882	0	1,339	30,562	2,912	12,543
5. No. of Persons X-rayed Large Films	321	258	1,061	88	12	131	617	34	171	128	128	163	1,308	39	978	258	1,345
6. Tuberculin Test	51	184	168	40	15	1,929	209	375	34	36	36	24	51	9	858	57	9,652
7. Field Visits	583	295	728	139	33	266	443	375	107	261	261	521	292	70	1,573	89	2,381
8. Office Visits	100	505	582	34	12	153	96	53	33	233	300	144	29	29	667	185	1,577
9. Cases Hospitalized	24	17	33	2	1	33	11	12	10	20	13	10	1	1	55	79	17
D. MATERNITY SERVICE																	
1.-2. Patients Admitted to Maternity Medical Service	141	98	171	78	34	70	139	0	0	51	9	33	0	0	666	91	549
3. Visits by Antepartum Cases to Medical Conferences	277	215	485	194	40	139	424	0	0	123	24	46	0	1,342	234	1,393	15
4. Patients Admitted to Maternity Nursing Service	293	323	372	81	23	163	161	137	13	105	86	59	2	154	100	473	51
5. Field Nursing Visits	655	558	760	41	52	405	288	307	35	120	168	53	4	525	221	1,023	48
6. Office Nursing Visits	109	509	8	174	41	163	483	2	1	198	36	109	0	129	366	1,138	62
7. Patients given Postpartum Medical Examinations	42	55	41	4	34	16	51	0	0	15	1	6	0	134	36	144	0
8. Number of Midwife Meetings	0	1	12	0	0	0	7	2	0	7	25	0	0	0	5	0	30
9. Visits for Midwife Supervision	28	8	71	5	0	22	2	29	16	9	120	5	0	9	9	19	2
10. No. of Midwife Deliveries Supervised by health dept. personnel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11. No. of Individuals Enrolled in Classes for Expectant Mothers	0	0	0	0	0	0	115	0	0	24	0	39	0	0	8	0	0
E. CHILD HEALTH SERVICES																	
2.-3. Adm. to Well Child Medical Service — Infants	48	57	202	13	93	48	45	55	0	46	117	151	0	282	43	405	0
1.-b. Adm. to Well Child Medical Service — 1-4	10	8	86	0	10	5	4	70	0	53	428	60	0	287	7	6	0
1.-c. Adm. to Well Child Medical Service — 5 over	2	44	109	5	2	4	2	33	0	0	438	222	0	392	1	8	0
4. Visits to Well Child Medical Conference: Infants	63	61	216	14	93	62	47	57	0	86	447	96	0	422	50	488	0
1-4	11	9	124	0	25	8	4	72	0	226	2,749	62	0	469	7	25	0
5-over	5	47	141	5	4	5	3	40	0	0	4,031	223	0	552	2	19	0

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1956
4. No. of Persons X-rayed— Miniature Films	131,835	27,894	5,964	0	4	15,848	0	0	105	3,550	1,005	26,813	1,092	0	0	0 580,179
5. No. of Persons X-rayed Large Films	4,746	1,536	866	138	33	812	230	41	125	91	34	1,178	54	82	37	33,868
6. Tuberculin Test	298	318	35	10	140	178	140	36	69	9	2	590	7	33	0	20,435
7. Field Visits	1,314	1,559	244	257	169	820	178	43	180	132	36	1,461	59	103	27	32,529
8. Office Visits	5,853	712	80	106	71	200	292	63	244	44	11	693	1	140	25	40,091
9. Cases Hospitalized	77	49	11	5	5	21	15	0	11	8	1	45	1	4	3	1,675
D. MATERNITY SERVICE																
1.-2. Patients Admitted to Maternity Medical Service	397	782	81	174	5	71	81	1	47	34	43	82	70	70	50	12,983
3. Visits by Antepartum Cases to Medical Conferences	1,353	1,911	258	524	5	217	183	1	64	94	153	392	246	171	55	35,683
4. Patients Admitted to Maternity Nursing Service	424	764	232	208	9	74	430	128	68	66	61	248	60	68	89	16,662
5. Field Nursing Visits	1,012	1,607	286	280	3	319	902	237	103	91	79	586	150	78	145	34,324
6. Office Nursing Visits	548	2,298	408	729	7	232	185	111	159	152	154	408	25	249	178	39,881
7. Patients given Postpartum Medical Examinations	273	243	23	0	0	34	28	0	1	7	5	50	20	37	30	3,907
8. Number of Midwife Meetings	0	10	12	0	0	0	0	0	1	4	0	2	6	0	3	354
9. Visits for Midwife Supervision	24	27	20	6	1	0	88	38	12	7	0	52	13	28	24	1,758
10. No. of Midwife Deliveries Supervised by health dept. personnel	0	2	0	0	5	0	0	1	0	0	0	0	0	0	1	48
11. No. of Individuals Enrolled in Classes for Expectant Mothers	14	0	25	0	0	94	0	0	0	37	0	0	0	0	0	906
E. CHILD HEALTH SERVICES																
2.-3. Adm. to Well Child Medical Service — Infants	999	744	25	18	33	39	0	4	32	24	63	145	25	77	20	14,561
1.-b. Adm. to Well Child Medical Service — 1-4	1,018	112	38	0	3	74	0	3	26	12	43	277	5	32	15	9,855
1.-c. Adm. to Well Child Medical Service — 5 over	535	34	21	0	33	55	0	11	16	6	33	292	4	41	29	8,146
4. Visits to Well Child Medical Conference: Infants	1,522	1,258	51	25	33	48	0	4	48	33	98	376	25	98	28	26,014
1-4	1,739	213	44	0	3	86	0	3	32	15	92	704	6	39	26	25,472
5-over	733	100	24	0	34	70	0	0	11	44	6	86	5	45	63	18,416

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

[illegible]

TABLE 1 (continued)

	Flagler	Franklin	Gadsden	Clichrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
6. Admissions to Nursing Service Infants ----- 1-4 ----- 5-over -----	92 65 143	23 27 42	590 1,053 459	63 132 22	0 2 36	32 71 135	44 15 8	41 53 139	0 25 56	31 45 44	17 22 121	3,135 5,077 8,172	34 43 54	106 101 237	255 322 342	129 66 64	43 92 96
7. Field Nursing Visits--Infants 1-4 ----- 5-over -----	53 53 64	48 61 67	728 1,627 394	237 480 59	2 2 25	135 223 26	302 235 70	63 59 23	0 5 0	60 115 11	36 31 127	3,148 2,819 5,040	33 72 58	213 153 265	316 474 353	225 72 55	169 167 25
8. Office Nursing Visits--Infants 1-4 ----- 5-over -----	156 134 275	5 6 32	253 321 930	7 33 1	0 0 27	26 88 383	70 97 203	4 9 321	20 35 78	17 38 11	8 21 132	9,864 10,007 5,193	4 52 169	78 206 10	43 202 116	62 36 8	31 33 31
9. Nurse-Teacher Conferences 5-over -----	32	32	773	15	43	638	400	321	78	11	132	5,193	169	10	116	8	31
F. SCHOOL HEALTH 1. Pupils Examined by physician with parent present (b) Referred for Further Diagnosis ----- (c) Completed Referrals -----	82 2 0	19 2 0	355 9 6	137 14 1	103 3 3	121 30 2	566 19 3	155 13 11	140 6 1	266 2 0	222 89 0	2,598 705 41	317 28 0	250 3 0	109 49 41	47 1 1	49 0 0
2. Pupils examined by physician with parent not present (b) Referred for Further Diagnosis ----- (c) Completed Referrals -----	80 11 0	257 6 0	646 60 2	580 63 2	176 5 7	189 11 2	608 14 1	2,047 209 80	306 0 0	395 50 45	600 63 1	6,550 2,039 157	202 7 0	36 0 0	6 4 2	25 11 0	204 0 0
3. Screening by other health de- partments personnel -- Visual (b) Referred for further diagnosis ----- (c) Completed Referrals -----	450 1 2	18 9 0	1,241 358 34	202 19 0	4 4 2	374 83 21	41 5 1	1,891 23 57	96 4 4	783 183 6	108,35,376 17,24,25 6,681	0 0 0	0 0 0	1,574 177 27	131 63 12	78 7 5	11 0 0
4. Screening by other health de- partment personnel-Audio- meter Testing ----- (b) Referred for further diagnosis ----- (c) Completed referrals -----	33 35 0	0 0 0	340 10 1	0 0 0	0 0 0	185 38 0	0 0 0	1 0 0	0 0 0	0 0 0	0 0 0	936,291 5,453 78	0 0 0	960 41 1	1 0 0	918 25 1	0 0 0
G. DENTAL HEALTH 1. Adm. for Dental Treatment (a) Maternity Patients -----	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	3,067	0	0	0	0	0	0	4	0	0	0	0	924	0	0	393	188
2. Topical Fluoride Applications	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	3,287	0	0	0	0	0	0	27	263	156	22	0	0	0	0	0	0
3. No. of Children Screened—	0	106	755	214	3,560	6,565	0	329	0	44	32	0	16,585	0	0	23,014	600
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	1,168
4. Referrals of Children Screened—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
(b) Others	24	0	175	2	2,868	1,741	0	84	22	78	20	0	464	0	0	5,578	627
5. No. of Children who Com- pleted Referrals - Dentist	24	0	0	0	0	0	0	32	0	2	0	0	0	0	0	523	21
(b) Others	0	0	0	0	0	68	0	36	4	0	0	0	207	0	0	83	178
H. CHRONIC DISEASES																	
1. Adm. to Cancer Service	121	8	131	48	33	121	13	32	14	28	32	42	19	12	1	7	283
2. Field Visits—Cancer	8	13	100	178	40	263	18	61	32	71	93	52	121	27	0	19	567
3. Office Visits—Cancer	200	5	451	72	42	515	7	34	9	26	49	42	0	15	2	0	492
4. Adm. to Crippled Children	75	19	93	70	50	109	14	33	27	37	62	20	10	7	17	44	175
5. Field Visits-Crippled Children	162	9	224	550	91	308	38	66	44	102	8	34	8	10	46	82	487
6. Office Visits-Crippled Children	154	4	32	82	102	47	3	54	15	53	30	7	1	1	24	15	23
7. Adm. to Diabetes Service	4	8	3	23	21	36	7	12	10	9	14	3	3	1	6	6	69
8. Field Visits-Diabetes	5	1	8	34	41	284	2	12	31	17	37	8	7	2	8	11	519
9. Office Visits-Diabetes	5	26	5	26	104	135	7	35	12	8	75	3	3	0	86	3	3
10. Admissions to Heart Disease																	
Control	1	0	9	29	7	31	2	3	8	5	5	3	14	4	0	8	146
11. Field Visits-Heart Disease	2	0	11	84	1	108	1	1	13	18	7	6	40	7	0	14	2,056
12. Office Visits-Heart Disease	0	0	29	122	6	119	1	0	21	3	2	3	4	0	0	1	497
J. MENTAL HEALTH																	
1. Admission to Service	10	19	1	0	31	13	0	24	0	29	47	1	272	35	4	10	257
3. Cases Closed	0	1	0	0	1	8	0	6	0	15	5	0	219	5	0	0	206
4. Testing	0	16	0	0	0	0	0	1	0	38	1	0	80	0	0	0	256
5. Counselling	3	5	0	0	0	9	0	45	0	0	43	0	0	33	4	0	3
6. Local Therapy	0	0	0	0	0	5	0	0	0	0	0	0	793	0	0	0	72
7. Referred for further Service	4	2	2	0	20	9	0	2	0	4	13	13	1	1	0	12	40

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	56	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2. Topical Fluoride Applications	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	333	0	1,308	0	0	0	0	0	0	918	0	921	0	0	0	70	0
3. No. of Children Screened—	0	0	0	0	0	0	0	0	0	0	0	7,033	0	0	0	0	0
(b) Others	250	0	916	0	0	0	0	0	0	16	0	1,880	0	0	0	30	0
1. Referrals of Children Screened—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. No. of Children who Com- pleted Referrals - Dentist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) Others	0	0	0	0	0	0	0	0	0	10	0	217	0	5	0	0	0
H. CHRONIC DISEASES																	
1. Adm. to Cancer Service	3	26	32	17	0	31	16	21	4	8	18	713	59	33	34	5	7
2. Field Visits—Cancer	5	37	151	37	0	118	5	12	12	21	42	908	34	84	89	18	8
3. Office Visits—Cancer	0	42	24	13	0	47	51	16	9	5	9	1,775	73	35	6	1	1
4. Adm. to Crippled Children	7	33	99	15	4	33	15	26	6	20	13	863	32	66	107	20	13
5. Field Visits-Crippled Children	36	8	233	35	6	146	70	29	8	28	31	992	75	233	74	56	76
6. Office Visits-Crippled Children	0	96	81	0	5	25	9	9	7	2	4	109	18	48	243	19	15
7. Adm. to Diabetes Service	3	18	25	4	3	17	12	9	12	3	21	431	29	19	8	19	7
8. Field Visits-Diabetes	3	28	27	30	0	62	0	0	3	5	10	1,261	35	134	20	20	10
9. Office Visits-Diabetes	4	128	81	0	6	39	60	7	58	4	102	4,461	174	91	29	92	61
10. Admissions to Heart Disease	0	21	104	11	5	68	18	2	4	0	3	113	5	4	0	0	9
Control	0	7	817	13	9	29	2	10	2	0	2	1,414	3	6	1	0	4
11. Field Visits-Heart Disease	0	48	154	134	2	235	56	1	39	0	4	15	12	0	1	0	8
12. Office Visits-Heart Disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J. MENTAL HEALTH																	
1. Admission to Service	17	3	11	0	1	4	3	24	1	0	0	394	0	4	0	3	1
3. Cases Closed	0	1	3	0	0	0	0	3	0	0	0	428	0	0	0	0	0
4. Testing	13	0	2	0	0	0	0	0	0	0	0	401	0	0	0	0	0
5. Counselling	1	1	14	0	0	0	0	25	1	0	0	1,044	0	0	0	0	0
6. Local Therapy	1	0	0	0	0	0	2	1	0	0	0	84	0	0	0	0	0
7. Referred for further Service	1	3	6	0	0	3	0	2	2	0	0	104	0	9	0	2	0

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
(b) 1-4	0	0	0	0	0	0	88	0	0	0	0	0	0	4	0	5	0
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2. Topical Fluoride Applications	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. No. of Children Screened—	0	0	0	0	281	1	0	0	0	0	0	606	0	0	3	738	1
Dentist	6	442	0	5	0	0	688	16	0	1,109	49	0	0	0	0	6,264	175
(b) Others	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	362	1
4. Referrals of Children Screened—	0	0	0	0	211	0	173	13	0	406	0	408	0	0	3	1,374	36
Dentist	2	253	0	2	0	0	0	0	0	0	0	0	0	0	2	1,222	1
(b) Others	0	0	0	0	0	0	118	3	0	51	0	0	0	0	0	473	2
5. No. of Children who Com- pleted Referrals - Dentist	2	0	91	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
H. CHRONIC DISEASES																	
1. Adm. to Cancer Service	24	55	77	8	21	35	48	10	10	35	64	22	8	72	8	119	85
2. Field Visits—Cancer	35	190	20	8	4	83	101	3	9	120	109	31	10	33	12	132	89
3. Office Visits—Cancer	3	29	247	4	21	34	11	32	11	59	48	13	7	665	7	680	50
4. Adm. to Crippled Children Service	66	29	175	19	27	35	77	71	17	28	20	40	22	92	32	50	72
5. Field Visits-Crippled Children	210	48	630	9	27	123	187	230	34	53	49	104	59	155	89	225	144
6. Office Visits-Crippled Children	21	41	792	15	14	23	22	8	8	62	3	17	10	32	31	60	208
7. Adm. to Diabetes Service	25	12	23	7	7	8	60	19	18	13	19	30	18	36	19	32	26
8. Field Visits-Diabetes	63	39	7	0	4	23	179	77	39	52	110	18	14	34	22	148	8
9. Office Visits-Diabetes	5	152	188	17	46	114	24	32	30	69	110	145	19	198	80	40	43
10. Admissions to Heart Disease Control	1	3	2	1	15	0	6	1	4	8	25	2	4	6	1	9	18
11. Field Visits-Heart Disease	1	3	3	1	3	0	19	15	7	23	19	3	4	11	1	19	32
12. Office Visits-Heart Disease	0	10	0	0	93	0	0	0	0	7	19	2	0	0	1	3	29
J. MENTAL HEALTH																	
1. Admission to Service	3	0	289	2	1	2	8	3	6	3	30	4	1	255	12	22	9
2. Cases Closed	0	0	245	1	0	1	0	0	0	1	3	0	0	325	0	115	0
3. Testing	0	0	185	0	0	0	3	1	0	0	20	0	0	405	0	0	0
4. Counselling	0	0	486	1	0	3	5	1	0	1	19	0	0	79	0	0	2
5. Local Therapy	0	0	361	0	0	0	1	0	0	0	0	1	0	520	0	0	8
6. Referred for further Service	2	0	4	0	0	0	1	2	6	1	3	6	1	20	9	12	0
7. Referred for further Service	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1956
(b) 1-4	69	4	0	0	0	0	0	0	0	0	0	0	0	0	0	129
(c) 5-over	629	224	0	0	0	0	0	0	0	125	0	0	45	0	0	10,087
2. Topical Fluoride Applications	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
3. No. of Children Screened—	30,591	11,190	0	0	0	4	125	0	0	0	0	0	1,790	0	0	95,797
Dentist	0	0	25	0	27	235	0	1,287	0	0	0	0	130	19	0	46,814
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,683
4. Referrals of Children Screened—	9,548	6,189	0	0	0	13	35	0	0	0	0	0	1,211	0	0	11,806
Dentist	0	0	0	0	0	42	0	248	0	0	0	0	0	0	0	8,241
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,491
5. No. of Children who Com- pleted Referrals - Dentist	4,368	209	0	0	8	14	36	9	0	95	0	0	136	0	0	8,241
(b) Others	0	14	0	0	0	9	0	0	0	0	0	0	1	0	0	1,491
H. CHRONIC DISEASES																
1. Adm. to Cancer Service	304	354	27	13	44	66	16	40	13	20	7	7	98	8	18	3,710
2. Field Visits—Cancer	133	200	84	54	57	124	22	67	16	72	8	6	126	6	50	5,222
3. Office Visits—Cancer	513	1,211	9	6	26	32	6	38	3	23	23	6	175	9	32	8,077
4. Adm. to Crippled Children Service	15	52	61	35	52	56	35	49	31	19	29	85	26	58	20	3,493
5. Field Visits-Crippled Children	31	129	152	199	59	163	104	127	84	83	57	265	50	99	62	8,487
6. Office Visits-Crippled Children	7	25	11	17	24	26	7	37	2	133	36	20	6	81	23	3,158
7. Adm. to Diabetes Service	35	130	31	12	19	21	4	19	5	15	8	8	95	18	5	1,623
8. Field Visits-Diabetes	75	380	31	12	19	54	4	22	3	32	12	717	69	48	9	4,987
9. Office Visits-Diabetes	422	112	6	7	50	23	0	12	13	60	68	298	24	104	18	8,459
10. Admission to Heart Disease Control	48	14	2	1	3	1	5	0	1	1	0	0	8	15	9	905
11. Field Visits-Heart Disease	100	18	4	6	13	5	0	11	2	1	0	0	29	3	9	5,068
12. Office Visits-Heart Disease	77	16	1	0	0	0	0	0	0	0	0	0	5	7	10	1,900
J. MENTAL HEALTH																
1. Admission to Service	54	237	17	45	3	78	7	0	3	14	0	0	434	0	3	2,766
2. Cases Closed	43	219	0	25	0	41	0	0	0	0	0	0	25	0	0	1,944
3. Testing	68	205	10	70	0	53	0	0	0	3	0	0	263	0	0	1,974
4. Counselling	97	251	15	15	0	145	1	0	0	9	0	0	100	0	0	2,552
5. Local Therapy	15	0	0	0	0	6	0	0	0	0	0	0	32	0	0	1,908
6. Referred for further Service	2	54	1	15	2	32	4	0	0	11	3	0	0	4	0	485

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
8 Family Conferences	13	13	1	0	52	8	0	31	0	27	78	1	2,182	13	7	18	80
9. Conferences—Other Agencies	1	8	1	0	24	0	0	50	0	38	147	0	23	115	0	5	113
K. MISCELLANEOUS	476	127	57	170	53	578	5	14	16	41	50	253	91	1	90	14	327
1. Adm. to Morbidity Service	741	289	258	380	93	1,410	5	24	66	92	132	303	382	7	246	24	2,992
2. Field & Office Visits—Morbidity	400	30	100	102	230	810	35	456	224	49	646	107	1,937	105	62	4,447	570
3. General Medical Examinations	2,627	165	1,597	327	1,568	10,073	170	509	444	571	646	453	9,700	796	225	6,557	7,646
4. Health Cards Issued	6	6	59	60	18	143	6	67	10	11	34	8	86	33	109	0	17
5. Visits in the Interest of Vital Statistics																	
M. NURSING HOMES																	
1. Number of Nursing Homes	4	0	4	0	4	6	0	1	0	1	0	1	90	0	0	22	8
2. Admitted to Service	70	0	9	0	11	39	0	10	0	3	0	13	730	1	0	204	89
2. Visits to Nursing Homes																	
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public	4	3	13	2	23	357	0	1	0	0	0	1	11	1	0	253	571
2. Approved Water Supplies Installed, New Public Water Connections	8	7	1	2	1	24	2	0	6	0	0	1	10	0	0	72	1,174
3. New Specification Privies Installed	64	0	3	2	1	2	1	2	0	2	0	1	0	1	0	14	8
4. Percolation Water Table or Soil Log Test	1,036	0	256	14	2,801	307	0	21	16	260	18	62	214	0	37	1,324	81
5. Subdivision Analysis	2	0	3	0	1	187	0	0	0	0	1	4	0	20	0	0	25
6. Pollution Survey	6	0	17	0	0	0	0	12	0	0	0	0	0	17	0	0	0
7. New Specification Septic Tanks Installed	622	32	477	50	2,171	5,811	26	246	53	77	223	444	159	55	13	1,053	2,650
8. Rabies—Number of Animal Bites Investigated	230	2	60	20	104	526	2	27	0	77	23	10	2,513	2	0	789	671
9. Field Visits for Rabies	71	6	75	35	74	1,116	0	17	0	116	34	40	7,653	2	1	358	1,993
10. Investigation Investigated	378	11	178	64	230	1,179	17	69	27	35	51	45	6,020	104	22	1,909	1,461
11. Nuisances Corrected	151	21	138	42	56	560	18	38	24	24	584	14	3,716	154	14	839	1,069
12.-19. Field Visits	5,492	1,845	2,693	177	8,953	10,770	301	1,137	641	841	654	1,856	27,772	597	154	7,402	14,259

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
8 Family Conferences	4	11	28	0	1	17	6	5	1	1	0	0	240	0	31	0	8
9. Conferences—Other Agencies	5	3	9	0	0	11	0	95	1	1	0	154	1	3	0	0	0
K. MISCELLANEOUS	68	69	46	148	22	53	517	42	45	5	52	788	10	13	50	0	52
1. Adm. to Morbidity Service	209	290	407	483	79	276	2,213	109	101	39	79	4,270	24	27	66	0	134
2. Field & Office Visits—Morbidity	23	32	44	21	6	8	58	12	40	79	7	638	304	0	95	26	15
3. General Medical Examinations	160	385	773	125	81	389	489	505	471	343	943	35,621	251	851	523	294	34
4. Health Cards Issued	7	19	218	10	0	49	23	10	27	0	17	3	4	9	41	10	5
5. Visits in the Interest of Vital Statistics																	
M. NURSING HOMES																	
1. Number of Nursing Homes	0	0	0	0	0	0	0	2	0	0	0	30	0	3	0	1	0
2. Admitted to Service	0	0	0	0	0	0	0	40	0	0	2	353	0	26	0	16	0
2. Visits to Nursing Homes																	
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public	4	3	63	4	1	1	5	3	0	2	132	69	1	15	0	9	0
2. Approved Water Supplies Installed, New Public Water Connections	2	0	329	0	0	33	0	5	0	0	8	1,708	0	20	3	2	0
3. New Specification Privies Installed	0	2	110	8	1	0	2	5	0	0	1	280	1	5	7	53	0
4. Percolation Water Table or Soil Log Test	2	23	232	0	1	42	5	0	0	0	0	166	7	198	82	11	0
5. Subdivision Analysis	23	0	7	0	0	0	0	0	0	0	0	58	0	17	6	0	0
6. Pollution Survey	13	0	45	0	0	2	0	16	0	0	0	36	0	2	0	0	0
7. New Specification Septic Tanks Installed	29	34	116	96	8	34	26	80	26	12	347	2,770	12	338	28	27	2
8. Rabies—Number of Animal Bites Investigated	0	5	14	1	0	3	9	2	15	3	27	1,833	7	6	10	6	2
9. Field Visits for Rabies	0	23	34	1	0	2	28	5	16	7	73	7,769	3	3	11	9	2
10. Investigation Investigated	88	332	96	6	11	17	25	85	33	31	168	2,894	38	40	14	51	0
11. Nuisances Corrected	7	218	221	8	2	6	16	27	14	375	2,758	26,896	175	660	372	36	0
12.-19. Field Visits	263	703	887	903	87	419	414	986	165	165	375	2,758	26,896	660	372	729	42

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1930																	
	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
8. Family Conferences	2	0	4	2	0	4	4	1	7	4	32	9	1	873	10	30	0
9. Conferences—Other Agencies—	0	0	30	3	1	0	2	0	0	4	25	4	0	1,816	1	7	4
K. MISCELLANEOUS																	
1. Adm. to Morbidity Service—	29	151	19	49	47	4	36	206	4	207	118	136	26	103	23	326	56
2. Field & Office Visits—																	
Morbidity	93	298	40	261	548	11	224	228	4	375	270	782	30	232	88	985	105
3. General Medical Examinations	0	65	13	208	82	1	505	147	0	71	75	19	0	128	44	39	4
4. Health Cards Issued	907	2,713	2,849	795	168	283	2,057	2,234	23	1,189	638	905	14	1,368	417	3,996	2,171
5. Visits in the Interest of Vital Statistics	13	1	1	18	4	20	20	2	16	40	66	38	6	7	13	19	74
M. NURSING HOMES																	
1. Number of Nursing Homes	10	5	3	1	0	1	5	2	3	0	0	0	1	29	8	27	7
Admitted to Service	17	9	22	2	0	4	33	10	11	0	0	0	6	99	44	94	27
2. Visits to Nursing Homes																	
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public	23	13	8	0	0	0	1	52	9	6	13	8	2	610	39	2	6
2. Approved Water Supplies Installed, New Public Water Connections	2	6	0	0	0	0	0	1	40	5	2	0	1	967	1	0	1
3. New Specification Privies	1	0	0	4	0	0	127	4	4	5	0	1	0	0	0	1	2
4. Percolation Water Table or Soil Log Test	63	95	42	3	7	10	201	312	87	8	66	236	1	1,394	17	227	90
5. Subdivision Analysis	5	5	0	2	4	0	10	9	4	3	7	32	0	111	3	36	0
6. Pollution Survey	1	0	23	0	0	0	7	2	0	2	1	0	0	0	45	5	1
7. New Specification Septic Tanks Installed	682	948	502	27	0	31	979	228	209	31	165	613	9	2,342	115	2,050	77
8. Rabies—Number of Animal Bites Investigated	37	59	104	25	1	8	182	109	6	125	19	15	10	387	34	130	8
9. Field Visits for Rabies Investigation	97	155	218	53	1	21	357	4	34	248	0	23	15	222	38	33	37
10. Complaints Investigated	200	144	250	25	4	29	298	489	123	330	43	167	2	2,666	121	724	38
11. Nuisances Corrected	109	44	55	21	3	6	183	309	44	578	7	88	138	2,1047	46	320	440
12.-19. Field Visits	1,735	1,806	3,083	1,208	129	503	3,928	1,457	596	5,933	415	2,995	138	19,088	919	16,358	

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1936																
	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1936
8. Family Conferences	77	228	18	169	2	51	9	0	3	12	0	1,044	0	5	5	5,485
9. Conferences—Other Agencies	4	91	12	296	1	56	0	0	0	10	0	404	0	6	11	3,595
K. MISCELLANEOUS																
1. Adm. to Morbidity Service	1,018	474	86	0	165	183	31	75	84	17	101	182	29	117	23	8,468
2. Field & Office Visits—																
Morbidity	8,952	1,323	233	0	310	787	57	100	203	80	263	1,618	157	123	26	35,036
3. General Medical Examinations	92	22	60	0	67	186	245	26	45	5	70	423	37	146	118	14,028
4. Health Cards Issued	19,561	244	483	660	305	1,775	710	584	329	428	65	2,196	355	610	477	137,821
5. Visits in the Interest of Vital Statistics	6	209	0	17	22	112	11	7	8	12	7	92	7	2	4	1,997
M. NURSING HOMES																
1. Number of Nursing Homes Admitted to Service	48	16	4	4	6	9	10	1	1	0	0	18	0	0	1	399
2. Visits to Nursing Homes	630	110	12	22	2	58	74	11	7	0	0	263	0	0	5	3,188
P. SANITATION																
1. Approved Water Supplies Installed, Private & Semi-Public	96	6	25	45	7	366	25	3	2	16	2	20	1	25	3	2,986
2. Approved Water Supplies Installed, New Public Water Connections	3	0	8	132	3	6	17	2	0	74	2	18	0	15	3	4,727
3. New Specification Privies Installed	13	12	7	0	0	4	9	3	13	2	26	1	3	10	0	828
4. Percolation Water Table or Soil Log Test	2,009	272	129	456	110	1,335	447	14	18	28	0	409	2	4	0	15,177
5. Subdivision Analysis	33	30	16	24	6	256	13	2	0	8	0	57	0	7	1	1,381
6. Pollution Survey	9	25	2	0	42	5	1	0	0	0	0	42	0	2	0	633
7. New Specification Septic Tanks Installed	4,208	1,277	131	477	50	1,368	373	24	43	112	30	1,457	12	95	24	36,836
8. Rabies—Number of Animal Bites Investigated	210	209	7	26	14	60	51	8	8	13	2	207	2	12	17	9,104
9. Field Visits for Rabies Investigation	290	385	5	49	16	95	112	73	1	24	0	305	11	13	0	22,513
10. Complaints Investigated	1,111	450	98	89	42	221	177	53	16	38	23	370	37	93	64	24,269
11. Nuisances Corrected	542	295	13	54	15	119	66	56	12	12	5	131	8	23	44	13,742
12-19. Field Visits	17,247	5,141	450	1,576	548	2,659	938	917	423	517	1,168	2,705	270	653	78	216,152

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Alachua	Baker	Bay	Bradford	Beevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
R. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service	130	37	219	76	104	1,094	21	64	23	93	26	51	5,567	16	10	679	545
2. Field Visits to Food-handling Establishments	2,637	642	1,285	757	284	2,183	299	324	188	792	39	395	32,171	69	115	1,840	2,290
3. Number of Food-handlers' Certificates Awarded	43	0	0	0	0	26	0	0	0	0	0	0	3,349	0	0	0	0
4. Dairy Farms Admitted to Service	48	3	5	4	4	1	12	7	2	6	0	7	80	4	0	0	109
5. Field Visits to Dairy Farms	276	28	84	54	33	2	251	90	4	70	0	50	1,496	29	0	0	905
6. Milk & Milk Products Plants Admitted to Service	4	0	13	1	1	4	0	0	0	5	0	4	95	5	0	0	5
7. Field Visits to Milk & Milk Products Plants	116	0	42	24	5	15	0	1	0	24	0	24	3,626	5	0	0	171
8. Cows Tuberculin Tested	1,220	0	187	0	0	0	167	1	0	4	0	0	5,873	110	0	0	4,217
9. Cows Bangs Tested	196	34	154	103	0	0	332	0	0	4	0	328	0	0	0	0	3,713
10. Dairy Farms under Mastitis Control Program	82	0	10	0	0	0	0	0	1	4	0	0	0	0	0	0	60
V. HEALTH INFORMATION																	
1. Meetings Attended	130	48	27	56	84	131	32	78	27	184	69	9	944	23	14	188	210
2. Lectures and Motion Picture Showings	131	46	103	39	96	122	36	60	16	45	64	6	1,298	32	14	107	196
4. Radio & Television Programs	9	0	0	0	0	4	1	1	0	0	11	0	30	0	0	0	3
5. News Articles Published	12	19	1	34	2	290	0	25	10	84	11	0	88	6	26	0	29
6. Exhibits Displayed	4	0	0	1	0	0	0	0	4	8	0	0	2	0	0	4	1
X LABORATORY																	
1.-21. Specimens Examined	15,614	1,608	9,236	1,631	8,460	28,004	1,207	2,840	958	2,012	1,691	2,787	88,047	2,622	1,351	21,376	26,221

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
R. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service	8	40	76	4	24	113	44	32	70	12	291	2,736	51	78	115	65	4
2. Field Visits to Food-handling Establishments	46	288	259	165	54	857	346	170	153	75	502	18,281	468	138	529	508	38
3. Number of Food-handlers' Certificates Awarded	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
4. Dairy Farms Admitted to Service	1	0	8	1	8	1	1	5	5	0	3	99	26	13	38	9	22
5. Field Visits to Dairy Farms	1	0	181	14	67	11	5	114	46	0	22	2,816	261	56	271	213	493
6. Milk & Milk Products Plants Admitted to Service	0	0	2	0	1	0	1	0	0	0	3	38	0	4	3	4	0
7. Field Visits to Milk & Milk Products Plants	2	0	41	7	2	0	1	1	2	0	3	993	1	10	29	6	0
8. Cows Tuberculin Tested	250	0	424	0	0	0	0	417	0	0	0	16,183	618	0	28	556	762
9. Cows Bangs Tested	250	0	486	0	0	41	0	0	0	0	0	2,258	604	0	0	1,351	766
10. Dairy Farms under Mastitis Control Program	0	0	0	0	0	0	0	0	0	0	0	99	0	0	0	3	0
V. HEALTH INFORMATION																	
1. Meetings Attended	34	7	181	3	6	21	30	113	7	5	23	583	1	17	18	62	8
2. Lectures and Motion Picture Showings	5	46	103	9	1	137	11	78	2	2	31	455	36	16	35	111	7
4. Radio & Television Programs	0	0	0	0	0	105	0	0	0	0	0	0	0	0	1	0	0
5. News Articles Published	3	10	19	0	8	4	4	50	9	1	12	44	22	28	1	16	0
6. Exhibits Displayed	4	0	1	0	0	201	2	0	0	0	0	1	0	0	0	0	0
X LABORATORY																	
1.-21. Specimens Examined	1,066	973	5,005	794	442	1,649	1,827	3,120	1,028	764	3,040	120,595	3,061	3,858	5,280	1,319	630

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
R. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service	134	279	172	89	9	37	231	32	149	123	43	113	34	447	39	621	180
2. Field Visits to Food-handling Establishments	413	746	1,107	182	91	325	703	407	340	505	271	448	65	2,815	341	1,956	795
3. Number of Food-handlers' Certificates Awarded	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
4. Dairy Farms Admitted to Service	9	9	15	2	1	11	28	13	3	0	1	7	1	0	11	41	10
5. Field Visits to Dairy Farms	22	34	156	15	1	306	138	218	21	0	4	39	10	0	55	429	135
6. Milk & Milk Products Plants Admitted to Service	4	6	4	1	0	1	4	6	2	7	1	2	2	0	3	28	1
7. Field Visits to Milk & Milk Products Plants	9	41	131	10	0	10	12	80	3	46	3	4	15	0	13	1,143	1
8. Cows Tuberculin Tested	731	323	1,657	15	0	684	2,593	241	141	2	0	247	0	0	0	3,904	1,176
9. Cows Bangs Tested	288	54	7,122	15	0	1,219	56	396	0	0	0	686	0	0	0	213	566
10. Dairy Farms under Mastitis Control Program	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
V. HEALTH INFORMATION																	
1. Meetings Attended	20	66	60	59	18	120	332	9	32	262	155	22	2	83	49	270	27
2. Lectures and Motion Picture Showings	72	25	33	50	19	78	318	250	30	296	273	15	1	627	20	514	1,990
4. Radio & Television Programs	0	2	5	0	0	0	10	0	0	0	13	2	1	0	3	4	0
5. News Articles Published	0	11	56	4	5	14	64	6	3	358	43	2	2	53	3	9	3
6. Exhibits Displayed	0	0	0	0	0	4	41	0	0	20	27	0	0	17	0	2	0
X. LABORATORY																	
1.-21. Specimens Examined	2,842	7,429	22,261	2,594	819	1,755	13,526	4,549	894	5,767	3,018	3,126	379	12,367	2,470	36,051	3,356

TABLE 1 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1956

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1956
R. PROTECTION OF FOOD AND MILK																
1. Food-handling Establishments Admitted to Service	2,395	872	69	184	53	217	107	52	64	84	18	1,026	25	127	65	20,608
2. Field Visits to Food-handling Establishments	10,385	4,227	130	862	190	997	385	307	647	253	63	5,708	206	353	399	105,809
3. Number of Food-handlers' Certificates Awarded	0	0	0	0	1	0	0	0	0	1	0	2	0	0	0	3,430
4. Dairy Farms Admitted to Service	42	45	8	7	28	10	8	7	11	2	3	29	0	16	19	929
5. Field Visits to Dairy Farms	677	544	45	43	242	129	22	100	157	7	42	327	0	192	210	12,263
6. Milk & Milk Products Plants Admitted to Service	64	14	0	5	0	4	2	0	0	2	0	26	0	2	1	385
7. Field Visits to Milk & Milk Products Plants	650	58	6	24	0	51	7	0	0	56	0	176	0	33	1	7,734
8. Cows Tuberculin Tested	6,203	4,856	0	235	510	100	0	267	289	44	44	515	0	541	401	56,692
9. Cows Bangs Tested	1,768	4,460	0	226	900	100	0	340	317	46	0	271	0	541	401	26,605
10. Dairy Farms under Mastitis Control Program	42	48	0	0	0	0	0	7	0	0	0	0	0	16	0	375
V. HEALTH INFORMATION																
1. Meetings Attended	842	204	50	24	46	224	26	6	30	46	18	96	0	35	6	6,612
2. Lectures and Motion Pictures Showings	773	378	13	15	40	348	42	51	53	94	15	101	1	21	20	10,070
4. Radio & Television Programs	54	1	25	3	80	18	0	0	0	1	10	0	0	28	3	447
5. News Articles Published	289	41	15	2	5	143	0	9	0	8	10	17	12	41	2	2,098
6. Exhibits Displayed	12	9	1	0	8	19	0	0	0	1	1	0	0	74	0	469
X. LABORATORY																
1.-21. Specimens Examined	34,365	13,796	2,804	4,607	3,166	6,901	1,882	2,286	2,172	1,271	911	5,685	1,309	2,879	1,902	559,255

DIVISION OF PUBLIC HEALTH NURSING

RUTH E. METTINGER, R. N.,
Director

This division continues to support the work of the bureaus, divisions and county health units, thus avoiding a duplication of effort.

Leadership in the community by the public health nurse has been a big factor in stimulating local support and in many county units the staff has increased. However, an increase of approximately four per cent does not meet the demands of a growing population and the introduction of new services.

IN-SERVICE EDUCATION

A. *In-service study groups*: Much progress has been made in the in-service study program. Growth in the majority of the classes is evidence that a more purposeful and permanent type of planning has been done. This year study was focused on interpersonal relationships and emotional health.

One of the outstanding features of the program was a three-day workshop in leadership training held at the University of Florida. A total of fifty public health and hospital nurses participated in the workshop. Representatives from the field of mental health were secured as resource persons.

B. *TB Hospital exchange visits*: These visits have continued with thirty-five public health nurses visiting the hospitals and twenty of the hospital nurses spending from one to two days in the county health units.

C. *State Hospital visits*: The 48-hour visit to the State Mental Hospital has been accepted with enthusiasm. Fifty-one public health nurses, seventeen health officers, all staff members of the Division of Public Health Nursing, Bureau of Mental Health, and the Division of Health Information have attended. The brief orientation program has given the health department personnel a much better understanding of the treatment and facilities used for mentally ill patients. It has also assisted the public health nurse to perform a more comprehensive follow-up program on patients referred to the health department by the social service department of the hospital.

D. *Institutes—workshops—seminars—etc.*: A two-day school health conference in Tallahassee was attended by all personnel of this division; one consultant remained for a week to serve as a resource person.

At the request of one of the district nurses' associations, this division in cooperation with the Bureau of Preventable Diseases, planned an institute on the Communicable Disease Center for the northwestern section of the state. Two representatives from the U. S. Public Health Service were resource persons.

A consultant attended a two-weeks workshop in Nashville, Tennessee, on child development and behavior.

E. *Advanced education*: Four public health nurses were granted scholarships in 1956 for the year's program of study in public health. (See scholarships awarded under General Summary).

Through extension work many nurses accepted responsibility for their own education. Local organizations such as the Cancer Society and TB Association have given scholarships for short courses at the University of North Carolina and New York University—Bellevue Rehabilitation Center, New York.

One consultant attended a three-day workshop on mental health in Chicago following the biennial convention of the American Nurses' Association.

F. *In-service training*: Eight nurses employed in the county units, who had no previous formal training or experience in public health, were sent to the training center in Gainesville.

CONSULTANT FIELD SERVICE

It has been most difficult to fill the many requests for consultant nursing services. One consultant resigned in the fall of 1955 and her replacement was not secured until August 1956. The new consultant was given an orientation for approximately two months, which included institutes, workshops, conferences, etc.

Public health nursing consultants have served primarily those counties where nurses are employed who have not had previous public health nursing training or experience, and lack local nursing supervision.

To render consultant service in a generalized public health nursing program with any continuity and carry 20 to 22 counties is a difficult assignment.

Assistance was given in developing programs for career day in the junior and senior high schools, and acting as resource persons in nursing.

Surveys were made of the nursing activities and facilities available in two counties. They showed the work accomplished and work that could not be carried on due to the limited nursing staff. In one county the survey assisted in acquiring new offices.

A. *Nursing home program*: This program continues to require considerable work. Each consultant has the responsibility for the nursing homes in her area. A one-day meeting preceding the annual convention of the Florida Public Health Association was held for health department personnel in connection with the nursing home program.

B. *Civil defense*: Two classes of four hours each were taught by one consultant. Those in attendance were registered nurses, practical nurses, nurses' aides, orderlies and x-ray technicians.

C. *Migrant program*: This division has participated in securing of personnel for the migratory labor project in West Palm Beach and Collier County. Three program-planning meetings were attended.

FIELD EXPERIENCE

At the request of the USPHS arrangements were made to provide experience for four foreign students. Three from the Philippine Islands, and one from Bolivia, who was the director of the division of public health nursing for the country.

Field experience was also provided for four students from the University of North Carolina, two from Peabody College and two from Vanderbilt University.

Four county health units provided field experience for a total of eighteen Florida State University students. Four of these students, upon graduation, were employed by three health departments.

Two conferences were held, one in Gainesville and one in Tallahassee, with the representative from the Nursing Accrediting Service of the National League for Nursing, to plan future field experience for students from the two state universities.

Dade County Health Department has given field experience to University of Miami students.

MIDWIFERY

The process of licensing 299 midwives was done through this division. Most of the yearly activities in the midwife program were centered around the new manual. Emphasis has been on interpreting the changes in its content and assisting the midwives in converting their equipment to meet the new standards.

Thirty-three counties were visited by the nurse-midwife consultant during 1956. Revisits to ten counties were made for the purpose of following through on educational activities started on previous visits.

Three classes in mother and baby care were taught in two counties by the midwife consultant. These were co-sponsored by local chapters of the American Red Cross and the county health departments. Forty-five mothers completed these courses and received certificates from the American Red Cross.

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Assistance was also given at the Alachua County Health Department with American and foreign students assigned to the agency for additional experience in public health.

IN-SERVICE TRAINING PROGRAM

GEORGE W. GEHRES, B.S., M.P.H.,
Coordinator

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Consultant	Counties Visited	Number Visits	Type Visits		Persons		Served		
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Sanitation	48	142	128	14	130	25	90	10	74
Record	65	171	126	45	149	33	57	3	
Total		341	277	64	307		169	13	85

BUREAU OF VITAL STATISTICS

EVERETT H. WILLIAMS, JR., M.S., Hyg.,
Director

A summary of the activities of the Bureau of Vital Statistics and a brief analysis of statistical data based on preliminary tabulations are given in this text. An analysis of vital statistics and morbidity data for 1956 in greater detail is presented in Supplements 1 and 2 of this report under the titles *Florida Vital Statistics, 1956* and *Florida Morbidity Statistics, 1956*.

POPULATION

The population of the state was estimated to be 3,875,700 as of July 1, 1956. Of this figure 3,143,000 were white and 732,700 were non-white.

This population estimate was made by the Bureau of Economic and Business Research of the University of Florida. The methods used in making these estimates were approved by the Population Committee of the Florida Development Commission. The director of the Bureau of Vital Statistics is a member of this committee. One of the objectives of this committee was to obtain population estimates which would be accepted and used by all state agencies and also by private business organizations.

BIRTHS

The number of births to Florida residents reached a new high with a total of 96,969, an increase of 8.7 per cent over the previous year. While the total birth rate of 24.8 per 100,000 population was higher than the previous year's rate of 24.5, it was still slightly below the estimated national birth rate of 24.9. White births totaled 69,557 and non-white births 27,412.

The white rate of 21.9 changed only fractionally from the previous year's rate of 22.0. The non-white birth rate increased considerably (7.8 per cent) from 34.5 in 1955 to 37.2 in 1956.

The figures in Table 3 show the upward trend in births and birth rates during the years 1931-1956.

DEATHS

The 36,876 resident deaths that occurred in Florida in 1956 represent an increase of 11.8 per cent over the total deaths for the previous year. Of these deaths, 28,500 were white and 8,376 non-white.

B. *Civil defense*: Two classes of four hours each were taught by one consultant. Those in attendance were registered nurses, practical nurses, nurses' aides, orderlies and x-ray technicians.

C. *Migrant program*: This division has participated in securing of personnel for the migratory labor project in West Palm Beach and Collier County. Three program-planning meetings were attended.

FIELD EXPERIENCE

At the request of the USPHS arrangements were made to provide experience for four foreign students. Three from the Philippine Islands, and one from Bolivia, who was the director of the division of public health nursing for the country.

Field experience was also provided for four students from the University of North Carolina, two from Peabody College and two from Vanderbilt University.

Four county health units provided field experience for a total of eighteen Florida State University students. Four of these students, upon graduation, were employed by three health departments.

Two conferences were held, one in Gainesville and one in Tallahassee, with the representative from the Nursing Accrediting Service of the National League for Nursing, to plan future field experience for students from the two state universities.

Dade County Health Department has given field experience to University of Miami students.

MIDWIFERY

The process of licensing 299 midwives was done through this division. Most of the yearly activities in the midwife program were centered around the new manual. Emphasis has been on interpreting the changes in its content and assisting the midwives in converting their equipment to meet the new standards.

Thirty-three counties were visited by the nurse-midwife consultant during 1956. Revisits to ten counties were made for the purpose of following through on educational activities started on previous visits.

Three classes in mother and baby care were taught in two counties by the midwife consultant. These were co-sponsored by local chapters of the American Red Cross and the county health departments. Forty-five mothers completed these courses and received certificates from the American Red Cross.

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Assistance was also given at the Alachua County Health Department with American and foreign students assigned to the agency for additional experience in public health.

IN-SERVICE TRAINING PROGRAM

GEORGE W. GEHRES, B.S., M.P.H.,
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DEATHS

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The total death rate as well as the white and non-white death rates showed an increase over the previous year. The total rate rose to 9.4 in 1956 from 9.1 in 1955, the white rate increased to 9.0 from 8.8, and the non-white rate became 11.3 in 1956 compared with 10.4 in 1955. The national death rate for 1956 was 9.4.

Crude death rates for the three leading causes of death showed an increase over the previous year. Diseases of the heart with a rate of 324.6 was 2.7 per cent higher than the rate of 316.1 in 1955. The cancer death rate climbed to 146.4 from the previous rate of 142.9 per 100,000 population, and the crude death rate for cerebral vascular disease increased to 111.1 in 1956 from 107.7 in 1955.

The tuberculosis death rate, still on the decline, fell to 6.6 in 1956 from the previous year's rate of 7.7 per 100,000 population. The syphilis death rate increased slightly to 3.2 in 1956 from 2.8 in 1955.

Tuberculosis and syphilis are the two most frequently fatal of the infectious diseases.

The trend in resident death rates for the twenty-six year period 1931-1956 is shown in Table 3.

MARRIAGE AND DIVORCE

Marriages occurring in Florida increased by 6.3 per cent to reach a total of 31,666. There were 25,148 white marriages, an increase of 6.2 per cent, and 6,518 non-white marriages, an increase of 6.5 per cent.

The crude total marriage rate was 8.1 per 1,000 population, and the white and non-white crude marriage rates were 7.9 and 8.9 respectively.

Divorces and annulments totaled 20,245, an increase of 2.5 per cent over the previous year. The divorce and annulment rate per 1,000 population in 1956 was 5.3. Divorce and annulment rates are not available by race.

ACTIVITIES

A major change in the operations of this bureau resulted from the expansion of the IBM tabulating unit. Alphabetic key-punches and verifiers, an accounting machine, a collator, and a reproducer were added to the equipment of this unit. The following operations have been transferred and are now being processed by the machine tabulating unit: indexing of birth, death, marriage and divorce records; preparation of monthly lists of deceased persons for each county and city supervisor of voting registration; property and equipment inventory formerly handled by the Bureau of Finance and Accounts; and the registration of medical practitioners, formerly handled by the Bureau of Narcotics. The latter will permit the tabulation of

data for each type of practitioner by age, race, sex, and geographic location.

Late in 1955 the bureau started a register of all persons injected with the new Salk poliomyelitis vaccine. A punched-card was prepared for each of the 1,006,203 injections reported to the State Board of Health during the year. In addition to the register of names, the system provides considerable statistical data.

In addition to the previously mentioned new procedures, the routine work load of the office has continued to increase. The number of paid requests for certified copies increased 9.7 per cent. A total of \$134,084.69 in fees was collected. There were 186,384 new current certificates filed for an increase of 8 per cent. There was a 22.5 per cent increase in the number of new birth certificates processed for children who were adopted.

A consolidated *Vital Statistics Scoreboard* is shown as Table 8. Counties are listed in order of rank showing their relative efficiency in birth and death registration. It is gratifying to note the improvement which has taken place in some counties. On the other hand, it is discouraging that the state average has shown little change. It is hoped that the local health departments will take remedial action in those counties which are at the bottom of the list and have shown little or no improvement. Proper registration of births and deaths in each county is the responsibility of the county health officer.

Articles by staff members:

Williams, E. H., Thorner, R. M., Ehrmann, W., Illegitimacy in Florida. *Eugenics Quarterly*, 219-227, Dec., 1956.

Thorner, R. M., Williams, E. H., Neonatal Mortality in Florida; A Statistical Analysis, *J. Florida M.A.* Part I: Birthweight, Race and Sex 42:926-930, May, 1956. Part II: Place of Birth and Attendance by Midwife or Physician, 42:1017-1021, June 1956. Part III: Cause of Death, 43:160-164, Aug., 1956.

Thorner, R. M., A Follow-up Study of Reported Cases of Poliomyelitis, Florida, 1954. *J. Florida M.A.* 42:563-566, Jan. 1956.

TABLE 2

ACTIVITIES OF THE BUREAU OF VITAL STATISTICS
DURING THE YEARS 1955 AND 1956

Activity	1955	1956	Per cent change
Current certificates filed	172,609	186,384	+ 8.0
Delayed birth certificates filed	3,552	4,202	+ 18.3
Amended certificates filed for adoptions	2,451	3,002	+ 22.5
Amended certificates filed for legitimations and corrections of parentage	616	743	+ 20.6
Requests for certifications			
Fee paid	82,600	90,600	+ 9.7
Free	14,953	14,877	- 0.5
Photostats made	92,044	96,359	+ 4.7
Birth registration cards made	26,812	29,683	+ 10.7
Fees collected and transmitted to State Treasurer	\$122,272.24	\$134,084.69	+ 9.7

TABLE 3

RESIDENT BIRTHS AND DEATHS WITH RATES PER 1,000
POPULATION, FLORIDA, 1931 - 1956

YEAR	POPULATION	BIRTHS	BIRTH RATE	DEATHS	DEATH RATE
1956*	3,886,600	96,969	25.0	36,876	9.5
1955	3,643,562	89,112	24.5	33,295	9.1
1954	3,481,528	85,011	24.4	31,433	9.0
1953	3,111,100	80,087	25.7	30,529	9.8
1952	3,006,400	74,219	29.7	29,136	9.7
1951	2,901,800	70,431	24.3	27,857	9.6
1950	2,797,100	64,370	23.0	26,525	9.5
1949	2,692,500	61,642	22.9	25,317	9.4
1948	2,587,800	59,685	23.1	24,505	9.5
1947	2,483,200	60,201	24.2	24,150	9.7
1946	2,378,500	54,347	22.8	22,750	9.6
1945	2,273,900	48,839	21.5	22,594	9.9
1944	2,196,195	49,186	22.4	23,251	10.6
1943	2,125,935	46,783	22.0	23,213	10.9
1942	2,055,675	40,675	19.8	21,144	10.3
1941	1,985,415	37,351	18.8	21,438	10.8
1940	1,915,155	33,696	17.6	21,458	11.2
1939	1,853,860	32,437	17.5	20,209	10.9
1938	1,795,322	31,101	17.3	19,949	11.1
1937	1,736,984	29,529	17.0	19,825	11.4
1936	1,678,646	28,116	16.7	20,050	11.9
1935	1,620,308	28,058	17.3	19,059	11.8
1934	1,585,596	26,722	16.9	19,518	12.3
1933	1,554,000	25,647	16.5	18,112	11.7
1932	1,530,356	27,242	17.8	17,721	11.6
1931	1,502,736	26,789	17.8	17,291	11.5

*1956 data based upon preliminary totals.

CAUSE OF DEATH (Numbers in parentheses refer to the International List of Causes of Death)	Rate Per 100,000 Population		Deaths		Rate Per 100,000 Population	
	Total	Colored	White	Colored	White	Colored
ALL CAUSES	36,876	8,376	28,500	81	9.5	11.4
Tuberculosis of respiratory system (001-008)	232	151	81	6	6.0	11.0
Tuberculosis, other forms (010-019)	12	6	6	1	0.3	8.3
Syphilis and its sequelae (020-029)	126	65	65	1	3.3	1.6
Typhoid fever (040)	15	3	3	1	0.4	1.7
Dysentery, all forms (045-048)	2	1	1	1	0.1	0.4
Diphtheria (055)	19	14	14	5	0.5	4.4
Meningococcal infections (057)	8	5	5	3	0.2	3.3
Acute Poliomyelitis (080)	13	10	10	3	0.3	4.4
Acute Infectious Encephalitis (082)	8	6	6	2	0.2	3.3
Measles (085)	0	0	0	0	--	--
Typhus and other rickettsial diseases (100-108)	151	77	77	74	3.9	10.1
All other diseases classified as infective and parasitic (030 to 138 with exception of above causes)	5,694	4,814	4,814	880	146.5	120.0
Malignant Neoplasms, including neoplasms of Lymphatic and Haematopoietic tissues (140-205)	545	413	413	132	14.0	18.0
Diabetes Mellitus (260)	70	44	44	26	1.8	3.5
Anemias (280-293)	18,874	15,441	15,441	3,433	485.6	468.2
Major Cardiovascular-Renal disease	4,371	3,319	3,319	1,052	112.5	143.5
Cerebral vascular disease (330-334)	15	7	7	8	0.4	1.1
Rheumatic fever (400-402)	12,789	10,820	10,820	1,969	329.1	268.5
Diseases of the heart	416	356	356	60	10.7	8.2
Chronic rheumatic heart disease (410-416)	9,267	8,329	8,329	938	238.4	127.9
Arteriosclerotic heart disease, coronary disease (420)	979	757	757	222	25.2	30.3
Nonrheumatic chronic endocarditis & Myocardial degeneration (421, 422)	1,449	870	870	579	37.3	79.0
Hypertension with heart disease (440-443)	678	508	508	170	17.4	23.2
Other diseases of heart (430-434)	293	204	204	89	7.5	12.1
Hypertension without heart disease (444-447)	590	499	499	91	15.2	12.4
General arteriosclerosis (450)	441	373	373	68	11.3	9.3
Other circulatory disease (451-468)	375	219	219	156	9.6	21.3
Chronic and unspecified nephritis (592-594)	79	581	581	51	2.0	54.5
Influenza (480-483)	981	231	231	400	25.2	6.4
Pneumonia (490-493)	243	184	184	47	5.9	10.9
Ulcer of stomach and duodenum (540-541)	277	120	120	80	6.3	21.4
Intestinal obstruction and hernia (560, 561, 570)	415	348	348	67	7.1	9.1
Gastritis, duodenitis, enteritis & colitis, except diarrhea of the newborn (543, 571, 572)	54	25	25	25	1.4	3.4
Cirrhosis of liver (581)	64	25	25	39	1.7	1.4
Acute nephritis and nephrosis (590, 591)	431	332	332	99	11.1	13.5
Complications of pregnancy, childbirth and the puerperium (640-652, 660, 670-689)	775	482	482	293	19.9	40.0
Congenital malformations (750-759)	144	60	60	84	3.7	11.5
Birth injuries, postnatal asphyxia & Atelectasis (760-762)	921	505	505	416	23.7	56.7
Infection of the newborn (763-768)	724	425	425	299	18.6	40.8
Other diseases peculiar to early infancy, and immaturity unqualified (769-776)	2,327	1,736	1,736	591	59.9	80.6
Symptoms, senility, and ill-defined causes (780-795)	1,133	875	875	258	29.2	31.1
All other diseases (residual)	1,416	981	981	435	36.4	59.3
Motor vehicle accidents (810-835)	415	296	296	119	10.7	2.7
All other accidents (800-802, 840-962)	3,147	1,679	1,679	1,468	32.5	40.4
All other accidents (800-802, 840-962)	415	296	296	119	10.7	2.7
Suicide and self-inflicted injury (963, 970-979)						
Homicide and operations of war (964, 965, 980-999)						
Infant Mortality (Deaths under one year of age)						

*Rate per 1,000 population.

**Rate per 1,000 live births.

***Rate less than 0.05.

TABLE 5
ESTIMATED POPULATION AND PRELIMINARY TOTALS OF BIRTHS,
DEATHS, AND INFANTS DEATHS BY COLOR, FLORIDA, 1956

COUNTY	Population Estimate 1956	BIRTHS			DEATHS			INFANT DEATHS		
		Total	White	Colored	Total	White	Colored	Total	White	Colored
STATE	3,886,600	96,989	69,557	27,412	36,876	28,500	8,376	3,147	1,879	1,468
Alachua	65,900	1,809	1,170	639	540	298	242	57	25	32
Baker	7,200	208	139	69	59	38	21	6	1	5
Bay	57,200	1,900	1,582	318	338	264	74	53	34	19
Bradford	12,000	343	227	116	126	89	37	7	5	2
Brevard	53,500	1,509	1,213	296	420	333	87	58	41	17
Broward	205,100	5,013	3,159	1,854	1,735	1,310	425	191	58	133
Calhoun	7,300	181	140	41	69	64	5	7	4	3
Charlotte	5,100	88	72	16	92	79	13	3	2	1
Citrus	6,200	150	99	51	101	75	26	8	4	4
Clay	17,400	545	453	92	136	109	27	16	13	3
Collier	12,900	321	240	81	93	52	41	19	7	12
Columbia	19,500	595	351	244	233	128	105	24	12	12
Dade	757,700	17,746	13,414	4,332	6,904	5,894	1,010	585	325	260
DeSoto	9,500	192	120	72	110	82	28	7	2	5
Dixie	3,900	107	88	19	40	30	10	2	1	1
Duval	400,100	11,133	7,985	3,148	3,234	2,138	1,096	289	180	109
Escambia	152,700	5,122	3,850	1,272	1,106	754	325	174	105	68
Flagler	4,800	131	58	73	52	27	25	4	1	3
Franklin	5,400	126	94	32	68	42	26	4	1	3
Gadsden	43,500	1,083	292	791	352	115	237	76	11	65
Gilchrist	2,900	64	53	11	33	27	6	2	2	0
Glades	2,800	52	28	24	17	8	9	2	1	1
Gulf	9,400	277	197	80	50	31	19	7	1	6
Hamilton	8,600	260	115	145	82	48	34	7	2	5
Hardee	12,000	228	190	38	107	101	6	4	0	0
Hendry	6,600	197	115	82	64	38	26	8	2	6
Hernando	8,700	204	110	94	84	66	18	11	6	5
Highlands	16,300	440	303	137	194	144	50	20	11	9
Hillsborough	332,600	8,091	6,485	1,606	3,054	2,487	567	259	175	84
Holmes	12,300	221	208	13	108	100	8	3	2	1
Indian River	17,100	467	291	176	175	135	40	20	9	11
Jackson	36,500	863	552	311	313	201	112	21	11	10
Jefferson	9,200	334	86	248	100	41	59	7	1	6
Lafayette	3,000	53	46	7	26	23	3	1	1	0
Lake	46,600	1,055	672	383	526	404	122	35	20	15
Lee	36,700	852	607	245	368	281	87	34	17	17
Leon	62,400	1,780	1,003	777	449	212	237	51	12	39
Levy	9,400	247	134	113	110	60	50	11	3	8
Liberty	2,400	85	61	24	30	24	6	3	2	1
Madison	15,000	425	167	258	148	62	86	17	6	11
Manatee	46,000	996	644	352	587	492	95	32	13	19
Marion	45,900	1,152	577	575	477	278	199	29	9	20
Martin	10,500	268	150	118	109	74	35	14	5	9
Monroe	40,200	1,335	1,187	148	299	234	65	40	28	12
Nassau	15,600	467	319	148	123	83	40	13	11	2
Okaloosa	51,100	1,744	1,026	718	222	201	21	49	45	4
Okeechobee	4,400	110	79	31	55	39	16	10	4	6
Orange	196,700	4,919	3,836	1,083	1,690	1,414	276	115	75	40
Osceola	13,700	283	226	57	204	186	18	6	5	1
Palm Beach	173,400	3,882	2,525	1,357	1,805	1,282	523	175	63	112
Pasco	26,800	538	437	101	324	293	31	13	10	3
Pinellas	235,700	3,875	2,987	888	3,712	3,449	263	130	80	50
Polk	164,500	4,160	3,073	1,087	1,427	1,109	318	118	75	43
Putnam	30,900	840	461	379	334	196	138	40	18	22
St. Johns	32,500	717	448	269	322	226	96	27	15	12
St. Lucie	29,800	785	387	398	275	179	96	49	15	34
Santa Rosa	23,200	678	593	85	143	119	24	22	16	6
Sarasota	44,400	953	739	214	544	477	67	20	9	11
Seminole	36,400	979	524	455	353	189	164	29	9	20
Sumter	10,800	276	157	119	123	82	41	14	4	10
Suwannee	14,800	358	241	117	180	122	58	6	4	2
Taylor	12,800	343	243	100	113	62	51	11	6	5
Union	7,900	105	65	40	44	33	11	4	4	0
Volusia	91,900	1,982	1,339	643	1,273	1,035	238	52	28	24
Wakulla	4,700	126	81	45	41	27	14	4	3	3
Walton	14,500	343	279	64	143	122	21	6	3	3
Washington	10,300	258	165	93	108	83	25	7	4	3

TABLE 6
PRELIMINARY TOTALS OF RESIDENT DEATHS FROM
SELECTED CAUSES, FLORIDA, 1956

COUNTY	Maternal Deaths	Tuberculosis	Syphilis	Dysentery (All Forms)	Acute Polio-myelitis	Malignant Neo- plasms (Cancer)	Diabetes	Anemias	Influenza and Pneumonia	Cardio-Vascular-Renal Dis.				Motor Vehicle Accidents	Other Accidents
										*Cerebral Vascular Disease	Heart Disease	Chronic Nephritis	All other Circulatory Diseases		
STATE	64	244	126	15	8	5,694	545	70	1,060	4,371	12,789	375	1,339	1,133	1,416
Alachua	2	2	2	0	0	73	6	0	29	89	153	14	22	9	21
Baker	0	1	1	0	0	2	0	0	2	8	23	0	2	3	1
Bay	0	2	0	0	1	38	4	1	13	38	85	4	9	14	27
Bradford	2	2	0	0	0	17	2	1	3	8	51	1	6	6	6
Brevard	3	0	0	0	0	63	11	0	14	40	132	5	11	16	27
Broward	4	4	3	5	1	307	32	4	59	174	563	22	60	56	69
Calhoun	0	1	0	0	0	10	1	0	2	10	19	1	1	6	2
Charlotte	0	0	1	0	0	20	0	0	4	11	35	2	1	7	1
Citrus	0	0	0	0	0	17	3	0	3	21	30	0	6	1	4
Clay	0	1	1	0	0	19	2	0	5	19	47	1	4	5	7
Collier	0	0	0	0	0	11	0	0	3	11	18	0	4	6	4
Columbia	1	0	2	0	0	24	1	0	18	36	66	1	12	5	9
Dade	5	49	35	0	1	1,227	117	17	173	611	2,481	56	244	194	225
DeSoto	0	0	0	0	0	15	3	0	5	14	41	2	3	2	5
Dixie	0	1	0	0	0	3	0	0	6	16	16	1	0	0	0
Duval	6	41	22	2	1	472	57	3	103	418	1,029	27	121	83	141
Escambia	7	9	3	0	2	131	15	1	44	145	316	10	27	44	57
Flagler	0	0	1	0	0	8	0	0	2	4	11	0	4	4	5
Franklin	0	1	0	0	0	7	1	0	1	7	25	1	5	0	3
Gadsden	1	3	1	1	0	39	1	1	23	47	103	4	7	11	14
Gilchrist	0	0	0	0	0	8	0	0	4	7	6	1	3	0	2
Glades	0	0	0	0	0	1	0	0	1	0	6	0	0	3	2
Glades	0	0	0	0	0	5	0	0	1	5	13	1	0	7	5
Gulf	0	1	0	0	0	7	1	0	5	11	27	1	1	4	5
Hamilton	0	1	0	0	0	19	0	0	0	14	43	4	5	1	1
Hardee	1	2	1	0	0	11	0	0	4	5	20	1	1	2	3
Hendry	0	1	1	0	0	7	6	0	2	5	24	3	3	3	8
Hernando	0	1	1	1	0	28	2	0	6	16	62	2	9	14	11
Highlands	1	4	2	0	0	527	59	5	62	297	981	41	89	99	104
Hillsborough	1	28	4	0	0	15	1	0	5	18	28	2	5	7	8
Holmes	0	0	0	0	0	25	1	0	4	19	72	0	5	4	9
Indian River	0	0	1	0	0	43	3	0	10	53	81	3	12	20	19
Jackson	1	3	1	0	0	10	0	0	5	18	32	3	3	0	5
Jefferson	1	1	0	0	0	4	1	0	0	4	11	1	1	1	1
Lafayette	0	0	0	0	0	4	1	0	0	4	11	1	1	1	1
Lake	0	2	2	1	0	81	5	2	16	55	204	2	17	15	27
Lee	1	1	2	0	0	50	7	0	13	51	121	4	17	6	17
Leon	0	2	0	0	0	47	6	1	20	64	122	7	20	6	27
Levy	0	0	0	0	0	17	0	0	2	20	33	1	1	1	8
Liberty	0	0	0	0	0	1	1	0	4	3	12	0	0	1	2
Madison	0	1	0	0	0	19	6	0	5	23	38	4	3	3	9
Manatee	0	3	4	1	0	79	10	1	20	72	229	6	25	21	17
Marion	0	3	2	0	0	59	8	1	15	75	161	7	18	21	15
Martin	0	1	0	0	0	18	1	0	3	19	30	3	2	2	6
Monroe	0	1	0	0	0	46	6	1	6	45	85	2	5	10	13
Nassau	1	2	1	0	0	12	0	0	4	10	39	1	8	4	8
Okaloosa	0	1	0	0	0	18	0	0	5	19	49	1	5	22	19
Okeechobee	1	0	0	0	0	8	0	0	7	5	12	0	2	6	1
Orange	1	15	3	0	0	243	24	3	41	230	659	21	68	55	53
Osceola	0	0	1	0	0	28	3	2	2	36	78	2	11	2	10
Palm Beach	3	7	2	3	2	273	24	5	43	213	658	9	52	65	82
Pasco	1	1	1	0	0	69	7	0	3	38	120	4	9	13	9
Pinellas	6	15	10	0	0	641	54	6	77	505	1,536	15	165	62	83
Polk	2	8	7	0	0	206	18	6	42	171	514	7	60	64	50
Putnam	2	1	0	0	0	38	1	3	11	33	90	16	9	14	24
St. Johns	1	1	1	0	0	38	5	3	6	37	101	3	22	11	11
St. Lucie	0	0	1	1	0	36	1	0	8	36	94	3	4	8	10
Santa Rosa	0	0	0	0	0	20	0	0	12	16	41	1	7	10	8
Sarasota	0	4	0	0	0	96	5	0	9	62	233	5	8	14	13
Seminole	1	4	3	0	0	45	7	1	10	44	120	11	10	6	23
Sumter	1	1	0	0	0	19	2	0	5	25	31	1	5	4	4
Suwannee	1	1	1	0	0	27	2	0	6	32	54	3	11	9	4
Taylor	1	1	1	0	0	12	0	0	3	14	38	6	6	4	4
Union	0	1	0	0	0	2	2	0	0	7	18	1	2	2	2
Volusia	2	5	2	0	0	119	16	2	35	162	535	12	66	28	36
Wakulla	0	0	0	0	0	8	0	0	1	6	7	0	5	0	0
Walton	2	3	0	0	0	14	0	0	3	38	47	0	5	1	0
Washington	0	1	0	0	0	12	0	0	2	18	33	0	5	6	0

TABLE 7
PRELIMINARY TOTALS OF MARRIAGES BY COLOR, DIVORCES, AND
ANNULMENTS FOR FLORIDA, AND EACH COUNTY, 1956

COUNTY	MARRIAGES			Divorces	Annulments
	Total	White	Colored		
STATE	31,666	25,148	6,518	20,100	145
Alachua	434	278	156	188	0
Baker	35	29	6	508	0
Bay	424	336	88	160	0
Bradford	63	38	25	510	4
Brevard	423	335	88	513	2
Broward	1,883	1,450	433	787	2
Calhoun	27	20	7	49	0
Charlotte	72	66	6	24	0
Citrus	87	61	26	54	0
Clay	82	71	11	64	1
Collier	148	133	15	16	0
Columbia	134	82	52	71	0
Dade	7,430	6,445	985	4,991	43
DeSoto	92	77	15	17	0
Dixie	28	24	4	13	0
Duval	1,986	1,527	459	837	4
Escambia	962	781	181	900	10
Flagler	43	21	22	287	1
Franklin	57	48	9	22	0
Gadsden	181	69	112	68	0
Gilchrist	50	39	11	8	0
Glades	24	16	8	4	0
Gulf	71	50	21	30	0
Hamilton	48	33	15	31	0
Hardee	135	135	21	322	3
Hendry	138	100	38	26	0
Hernando	130	111	19	33	0
Highlands	156	111	45	163	0
Hillsborough	2,884	2,404	480	1,410	9
Holmes	51	46	5	47	0
Indian River	195	129	66	32	0
Jackson	165	106	59	89	0
Jefferson	54	24	30	7	1
Lafayette	11	9	2	3	0
Lake	378	254	124	459	2
Lee	317	242	75	119	0
Leon	415	237	178	286	4
Liberty	75	41	34	31	0
Madison	10	9	1	23	0
Manatee	57	45	12	37	0
Marion	441	356	85	71	0
Martin	342	205	137	184	1
Monroe	117	84	33	19	0
Nassau	456	388	68	304	3
Okaloosa	62	54	8	16	0
Okeechobee	265	239	26	188	4
Orange	51	34	17	15	0
Osceola	1,586	1,282	304	392	4
Palm Beach	191	142	49	16	0
Pasco	1,543	1,090	453	646	5
Pinellas	315	261	54	102	0
Polk	1,988	1,732	256	738	5
Putnam	1,463	1,170	293	1,228	15
St. Johns	197	114	83	702	1
St. Lucie	201	145	56	670	11
Santa Rosa	322	174	148	136	0
Sarasota	126	115	11	99	1
Seminole	464	393	71	197	1
Sumter	322	196	126	203	0
Suwannee	112	76	36	77	3
Taylor	117	84	33	60	1
Union	77	56	21	19	0
Volusia	43	30	13	302	2
Wakulla	720	571	149	425	2
Walton	41	19	22	0	0
Washington	67	58	9	36	0
	61	48	13	16	0

TABLE 8
VITAL STATISTICS SCOREBOARD
Based on Promptness and Completeness of Certificates
Filed in 1956

COUNTIES	Rank	Percent of Certificates Filed on Time		Percent of Complete Certificates		Percent of Monthly Reports Submitted on Time	Total Score (Maximum Equals 500)	Change from 1955 Total Score
		Births	Deaths	Births	Deaths			
Wakulla	1	100	100	100	100	100	500	+ 5
Sarasota	2	100	100	99	98	100	497	+ 2
Hillsborough	3	96	99	100	100	100	495	+ 7
Orange	4	99	99	99	98	100	495	+21
Baker	5	99	95	100	100	100	494	+ 7
Hernando	6	97	97	99	100	100	493	- 2
Okeechobee	7	98	98	98	98	100	492	- 2
Volusia	8	96	97	99	99	100	491	+ 2
Dade	9	94	96	100	100	100	490	- 1
Escambia	10	93	98	99	99	100	489	- 2
Martin	11	100	98	99	100	92	489	+ 6
Citrus	12	88	100	97	99	100	484	+12
Polk	13	91	97	96	97	100	484	- 1
Franklin	14	92	98	96	97	100	483	- 3
Jefferson	15	88	98	98	99	100	483	+15
Monroe	16	97	90	98	97	100	482	+16
Charlotte	17	86	98	97	99	100	480	- 7
St. Lucie	18	92	94	98	96	100	480	0
Broward	19	86	96	98	98	100	478	+ 3
Gilchrist	20	88	94	96	100	100	478	+26
Bay	21	87	94	98	98	100	477	+ 1
Hardee	22	95	96	96	98	92	477	+ 9
Pinellas	23	91	93	99	100	92	475	+47
Marion	24	84	97	97	96	100	474	-10
Indian River	25	82	95	97	99	100	473	+84
State		88	95	98	99	92	472	+ 3
Gulf	26	94	87	93	98	100	472	+10
Gadsden	27	83	90	99	99	100	471	+22
Madison	28	88	100	95	96	92	471	-12
Duval	29	77	98	96	98	100	469	- 2
Levy	30	88	85	100	96	100	469	+ 3
Seminole	31	99	99	97	99	75	469	+ 2
Collier	32	90	95	99	99	83	466	-12
Holmes	33	94	90	95	94	92	465	+ 8
Nassau	34	97	96	99	98	75	465	+21
Palm Beach	35	71	96	99	99	100	465	-11
Putnam	36	89	81	97	97	100	464	+14
Suwannee	37	94	99	99	97	75	464	+ 2
St. Johns	38	90	93	99	98	83	463	- 6
Washington	39	85	87	95	95	100	462	- 4
Alachua	40	81	82	99	96	100	458	+47
Liberty	41	100	85	81	100	92	458	+31
Walton	42	92	83	100	100	83	458	-11
Brevard	43	88	89	98	99	83	457	-24
Highlands	44	74	93	99	99	92	457	-14
Lee	45	64	97	99	97	100	457	- 2
Lake	46	83	79	97	97	100	457	- 1
Leon	47	81	88	98	97	92	456	+11
Manatee	48	94	99	97	98	67	455	-36
Calhoun	49	85	83	94	92	100	454	+ 5
Clay	50	81	85	98	98	92	454	-12
Dixie	51	69	100	95	97	92	453	- 5
Santa Rosa	52	90	94	96	98	75	453	-25
Bradford	53	97	97	96	94	67	451	+ 4
DeSoto	54	100	100	98	94	58	450	-27
Union	55	84	86	91	96	92	449	+23
Osceola	56	87	96	99	99	67	448	-19
Lafayette	57	60	94	100	100	92	446	+ 4
Jackson	58	80	73	96	96	100	445	+14
Sumter	59	74	71	99	99	100	443	-28
Flagler	60	99	89	94	91	67	440	+21
Hendry	61	64	78	97	100	100	439	+16
Taylor	62	57	92	96	98	92	435	-10
Pasco	63	75	92	95	93	75	430	-14
Hamilton	64	56	73	98	98	100	425	- 2
Okaloosa	65	77	84	98	96	58	413	-28
Glades	66	25	100	75	100	100	400	-24
Columbia	67	35	69	98	99	58	359	+19

BUREAU OF MATERNAL AND CHILD HEALTH

R. W. McCOMAS, M.D., M.P.H., Director
 E. L. FLEMMING, Ed.D., Clinical Psychologist
 EARL LOMON KOOS, Ph.D., Social Scientist

The Bureau of Maternal and Child Health and the Bureau of Mental Health are now completely separated. A new director of the latter bureau was appointed in February 1956 relieving the director of this bureau of further administrative responsibility for that program.

One full-time *Consultant on Child Growth and Development*, a clinical psychologist, was added to the staff in September 1956. Also added was a social scientist who is part-time *Consultant on Family Life*. For the first time in recent years, funds became available to fill the position of *School Health Consultant* and plans were made to add this person to the staff on January 1, 1957; however, the applicant failed to accept the position. Other plans for filling it have been made which it is hoped will materialize during the current fiscal year.

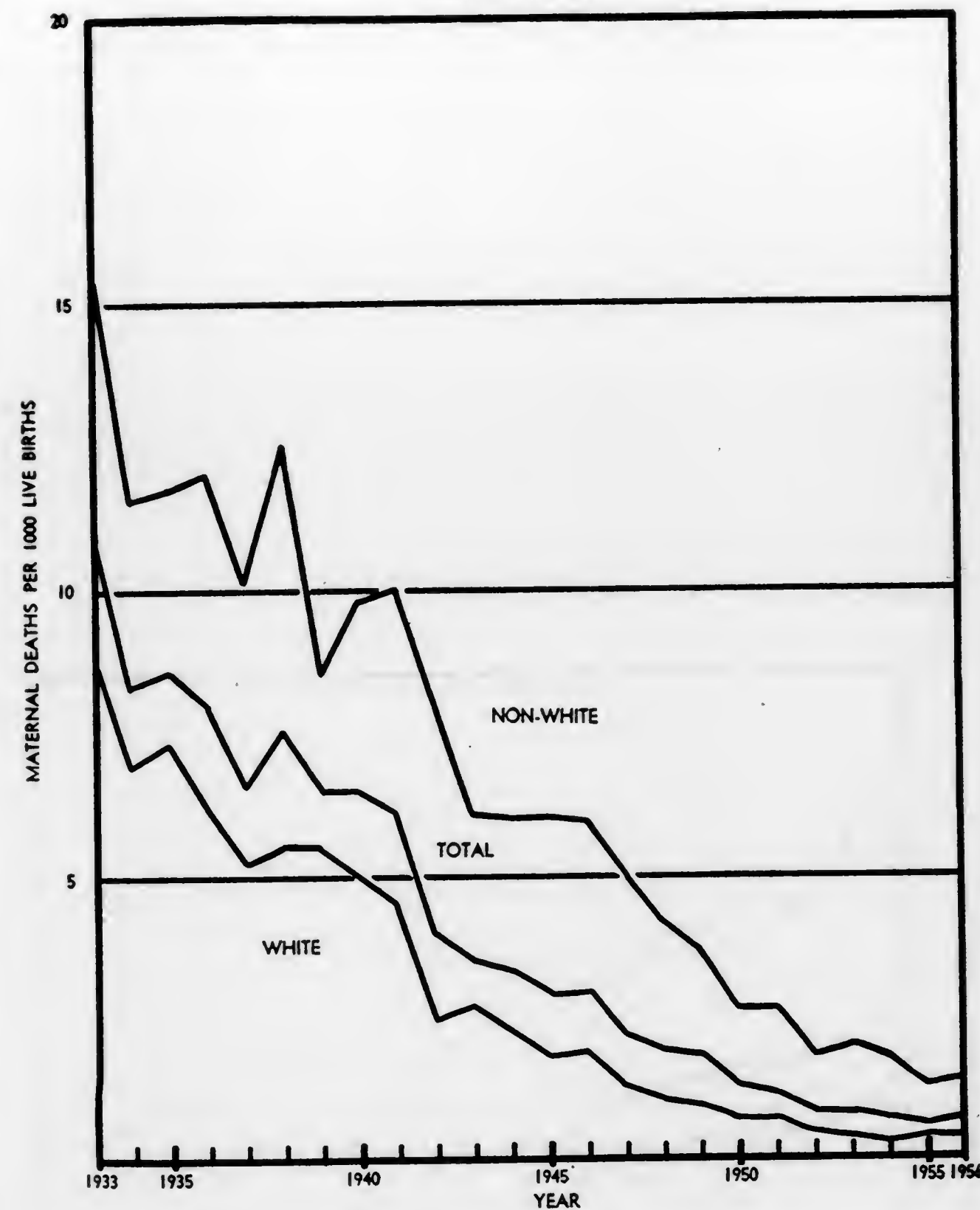
The study project on *Health Services for Migrant Agricultural Workers* terminated in 1956. A full report on activities relating to migrants appears in another section of this report.

MATERNAL HEALTH

The maternal death rate rose by 3 per cent over the previous year. This is the first time in nineteen years that the steady drop in the maternal death rate has reversed itself. Preliminary tabulations show a total of 64 maternal deaths with a rate of 6.6 per 10,000 live births. In 1955, there were 57 maternal deaths with a rate of 6.4 per 10,000 live births. There have been no significant changes in the relative importance of the reported causes of maternal death. The number of practicing midwives has been reduced and their supervision, if anything, has been improved.

This bureau is jointly responsible for supervision of the midwifery program, but the specific activities of the Nurse-Midwife Teacher will be reported by the Division of Public Health Nursing elsewhere in this volume. There was a sharp reduction in the number of midwives licensed: from 345 in 1955 to 299 during 1956. Nine new midwives were licensed for areas where there was definite need for their services and 10 were retired during the year. Late in 1956 at the request of the Governor, the midwife program was reviewed and a report prepared recommending certain steps that would improve maternity services for low-income families. It is hoped that the Hospital Program for the Indigent will secure more adequate funds

FIG. 1
 RESIDENT MATERNAL DEATH RATES
 (PER 1,000 LIVE BIRTHS) BY RACE
 FLORIDA 1933 - 1956



for the next biennium and that the Act can be interpreted to provide for both normal and abnormal obstetrical cases. This would do much to improve maternity services in areas served by hospitals and thereby reduce the necessity for midwives in those areas.

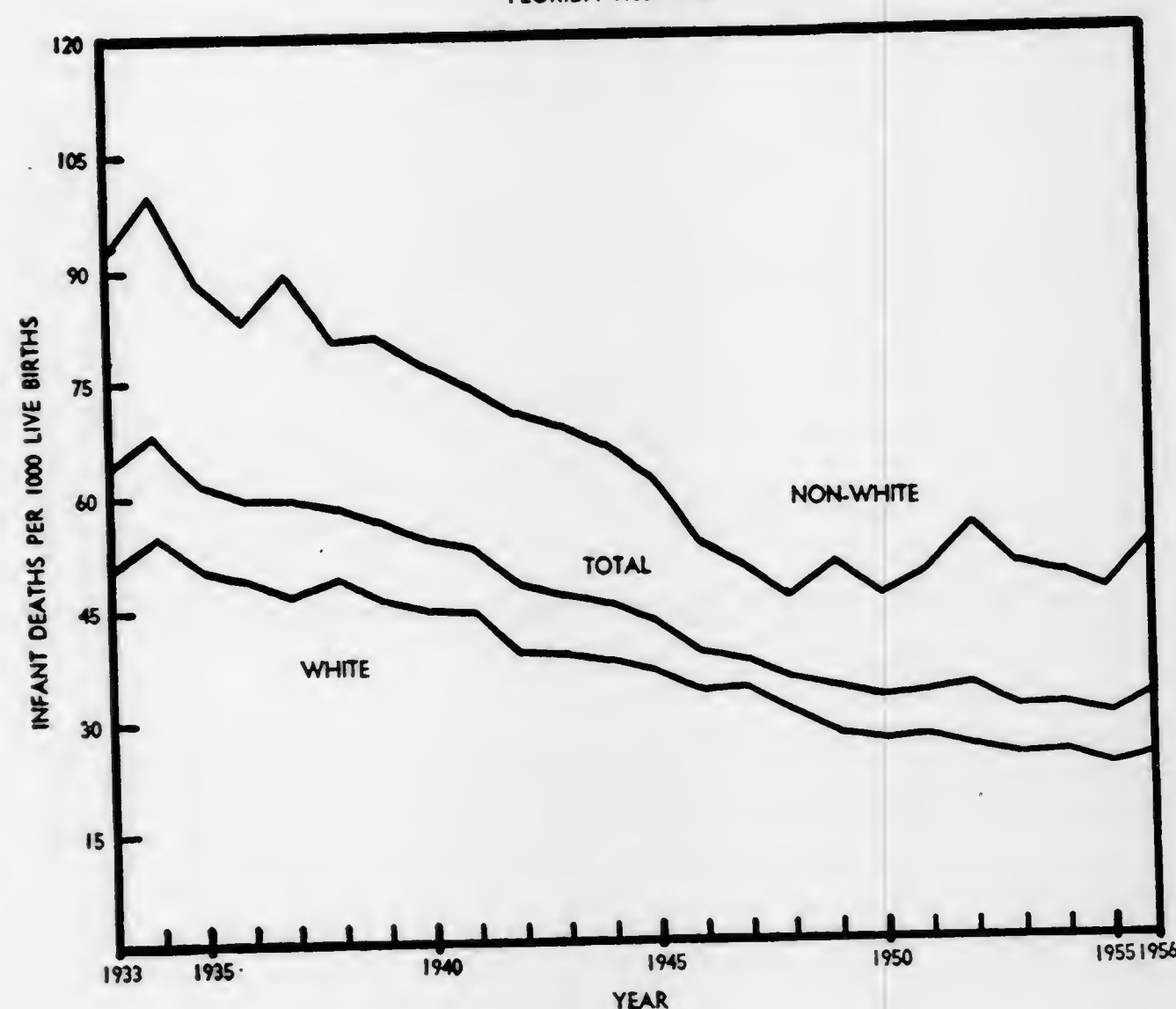
There has been continued emphasis on the development of low-cost maternity plans and the interest in this program continues to increase. There has been some tendency during the year to increase

hospital charges and in some areas private physicians have volunteered to provide prenatal services.

A review of maternal deaths continues to reveal that at least half of them are preventable, emphasizing the need for careful medical review of these deaths, education of the public, and better maternity services. The special form developed by this bureau for use in studying social and economic factors related to maternal mortality was not accepted by the maternal and child health committee of the Health Officers Conference in 1956. It was felt that the form was too long and would require too much time on the part of both public health physicians and nurses. The proposed form has been modified and it is hoped that it will be possible to present it for further discussion at the next conference.

The Annual Tri-State Obstetric and Pediatric Seminar was held in Daytona Beach on September 10-11-12. There was a record attendance with increased participation from the states involved—South Carolina, Georgia and Florida. Attending the Seminar were 254 phy-

FIG. 2
RESIDENT INFANT DEATH RATES
(PER 1,000 LIVE BIRTHS) BY RACE
FLORIDA 1933 - 1956



sicians, 88 nurses and three others making a total of 345 persons who came from the following states: Florida 258, Georgia 45, South Carolina 27, and 15 from other states. The Seminar is sponsored by the Bureaus of Maternal and Child Health of the three State Health Departments and the Maternal Welfare Committees of the three State Medical Associations. The program was well received and another Seminar is being planned for 1957.

CHILD HEALTH

The number of births reached a record high of 96,969 this year according to preliminary figures. The infant mortality rate increased in 1956 as compared with the preceding year. The provisional rate of 32.5 per 1,000 live births represents an increase of 9.4 per cent over 1955. At this time there has been no opportunity to study the probable causes for this increase; however, this will be done in the very near future.

At the time of the Annual Report last year, Salk vaccine was a major concern because the demand for it exceeded the supply. At this time vaccine is plentiful and the chief concern is with public apathy concerning its use. Local health departments, assisted by the State Board of Health, are engaged in a campaign urging the public to have their children vaccinated before the onset of the polio season.

There was an increase in the number of premature infants cared for at the *Premature Demonstration Center*, Jackson Memorial Hospital, Miami under the special project grant from the U.S. Children's Bureau. The annual report of the Center is not available at this time, but a preliminary report from the Dade County Health Department indicates that 261 patients were admitted and cared for under this program. Of this number 83 were white and 178 were non-white, and they came from Dade, Palm Beach, Broward and Monroe Counties.

Special equipment in the form of both standard and specialized incubators has been distributed to hospitals in various parts of the state to provide better services for premature infants. This equipment was placed in the hospitals on indefinite loan from the county health departments.

In July 1956 the U. S. Children's Bureau announced that additional monies were available to the state for the purpose of strengthening School Health Programs and providing certain health services for *mentally retarded children*. In addition a fixed sum was available for special projects for retarded children. The increased funds under the regular state formula were utilized to provide additional staff for the Bureau of Maternal and Child Health and to establish four positions in selected child guidance clinics for increasing their

services to retarded children. These positions were either clinical psychologists or psychiatric social workers at the clinics in Escambia, Orange, Sarasota-Manatee, and Palm Beach Counties. Considerable time has been spent during the past few months negotiating with the Children's Bureau for a special project grant for retarded children without success to date.

The *Consultant in Child Growth and Development* was employed to explore ways of helping parents and other individuals concerned with children understand the normal growth process and the inherent problems within this process.

In the initial phases of this program, it was necessary to contact people in health and education, discussing with them their felt needs in the understanding of the "normal child." These groups indicated a need for more formal training in a workshop experience in *Child Growth and Development*, in techniques of counseling or interviewing, and simple diagnostic procedures which would allow them to differentiate between those problems which are a part of the normal growth process and those which are the result of some traumatic experience.

Several different types of workshop experiences have been tried out. In one workshop parents in a single school met with the consultants for a series of two-hour sessions according to the age group of their children. Before the discussion began the parents were asked to indicate a behavioral problem within their child for which they had considered referral to a child guidance clinic for assistance. At the completion of the session the parents were asked to indicate whether or not the problem still seemed to require outside assistance or if it fell within normal growth limits. Of a total of 167 parents, 33 indicated behavioral problems in their children which seriously concerned them. Of these 33 only two indicated, at the completion of the workshop, that they still felt a need for outside professional help. This indicated a rather marked attitudinal shift within the parents as their understanding of the behavioral problems associated with the growth process increased. While this program has not been in effect long enough to have any measurable results, it would appear that parents and professionals in health and education have a tremendous need for understanding normalcy and that as their understanding increases, their tension about their children's behavior decreases.

During this time meetings have been held with personnel of ten different health departments outlining the proposed program and exploring their felt needs for in-service training in the areas previously mentioned. As a result of these contacts, workshops have been scheduled in four different health departments within the state.

In addition, the program has included a regularly scheduled tele-

vision show focusing entirely upon the child and how he grows, which has been presented through the courtesy of WMBR-TV in Jacksonville. The excellent response to this program certainly leads to speculation as to the great potential of television as a health education medium.

SCHOOL HEALTH

During 1956 the School Health Program in Florida received a tremendous boost because of two developments. First, many schools had the experience of having, for the first time for a whole school year, a school health coordinator appointed from the faculty. This is a requirement as set forth in the "Standards of Accreditation of Florida Schools, adopted April 20, 1954."

Early in the year a statewide conference was held at Florida State University in Tallahassee bringing together appropriate persons from the State Board of Health, the State Department of Education, Florida State University and the public schools. This conference was held jointly with a summer course for school health coordinators at Florida State University. Much time was given to discussion of the roles and responsibilities of school health coordinators in addition to ways and means of improving School Health Programs at the local level. Later in the summer a similar conference was held for negroes at Florida A & M University. Second, concurrently with these conferences, plans were developed by the Consultant on Health, Physical Education and Recreation, State Department of Education, for bringing a nationally known health educator into the state for the current school year to work with the school health coordinators in planning School Health Programs at the local level. This effort was assisted by financial grants from several voluntary health agencies as well as a grant from the Bureau of Maternal and Child Health of the State Board of Health. The services of Dr. George T. Stafford of the University of Illinois were secured and he started his work in September and is currently holding a series of school health "clinics" throughout the state.

During the year special equipment in the form of audiometers and illuminated Snellen charts has been distributed to county health departments for use in the School Health Program. This equipment was purchased with funds from the U. S. Children's Bureau.

HEALTH SERVICES FOR MIGRATORY AGRICULTURAL WORKERS

As previously indicated the special study project on Health Services for Migratory Agricultural Workers terminated on June 30, 1956. The two full-time persons employed on this project were transferred to other programs. The report has been completed and is now being printed and will be available for distribution early in 1957. As

a result of the study project, and of the 1954 Washington Conference on Migrants, a second conference relating specifically to the health problems of migrants was held in West Palm Beach in April. This conference was attended by representatives of health departments and their local units from New York to Florida. Several persons representing other migrants streams and from the Federal services were also in attendance.

In the summer of 1956 the State Board of Health received a grant of \$54,900 annually for a period of five years from the Children's Bureau for the purpose of developing a health service project for migrants in the Belle Glade-Pahokee area of Palm Beach County and the Immokalee area of Collier County. This provides for the employment of additional physicians and public health nurses in these two areas; also a medical social consultant, a health educator, a nutritionist and a health aide. Selected nursing districts have been designated and the project team will focus its attention on developing better and more effective methods of providing health services to negro migrants. The project team is now complete with the exception of a nutritionist and over the past several months organizational and planning meetings have been held to plan the project.

The Governor's Advisory Committee on Migrant Labor held a series of hearings about the state early in the year and has recently completed its recommendations to him.

Late in the year the Governor appointed a Committee on Children's Institutions, of which the director of this bureau is a member, to advise the Cabinet concerning the state's responsibilities in this area and to do the necessary studies to develop plans for these institutions in the future. The committee has held two meetings and plans to have other meetings in the several institutions to be studied. The committee will report directly to the Governor and the Cabinet with the exception of its legislative recommendations which will channel through the Florida Children's Commission.

BUREAU OF PREVENTABLE DISEASES

C. M. SHARP, M.D., Director

JAMES O. BOND, M.D., M.P.H., Epidemiologist

EPIDEMIOLOGY

Services in epidemiology in 1956 were carried out by one physician epidemiologist and two clerical staff members, under the direct supervision of the director of the bureau.

Early in 1956 the new *Rules and Regulations for Control of Communicable Diseases* were adopted and distributed throughout the state. These revised and replaced the old Chapter 34 of the Sanitary Code. One important change in reporting of diseases was made, affecting the reported numbers of certain diseases, to be noted later. Measles, whooping cough, streptococcal infections, influenza, chickenpox, mumps and hookworm reports were required by number of cases only, rather than by individual names of cases. Increased total numbers of such cases reported were expected as a result of this change.

POLIOMYELITIS

Poliomyelitis continued to receive the major amount of effort and interest in the control of communicable diseases. Total reported cases fell from 466 in 1955 to 364 in 1956; a 22 per cent reduction. The rate of paralytic polio per 100,000 population dropped to 2.7 from 3.6 in the preceding year. The large number of Salk vaccine immunizations undoubtedly played a role in this reduction, but the exact magnitude of the effect is unknown. Under the Federal Poliomyelitis Assistance Act of 1955, 1,335,552 cc of vaccine had been distributed to Florida counties as of December 31, 1956. Adding the 315,000 cc of vaccine used in the National Foundation for Infantile Paralysis program of 1955, the distribution of Salk vaccine by injection number and age is given in Table 9. It is seen from this that at least 575,222 children under 20 had received one or more injections by the end of 1956. This is 45.9 per cent of the estimated eligible population. 178,798 or 14.3 per cent were known to have received the completed series of three injections. An additional unknown number of injections of commercial vaccine were given to individuals under 20, but the number is estimated to be relatively small.

The surveillance for safety of the vaccine was continued as a part of the National Surveillance Program. Table 10 shows that 83 cases of poliomyelitis were reported in 1956 following Salk vaccine immunization. No correlation of these cases was found with paralysis and site of inoculation, manufacture or lot number. It was

again concluded that Salk vaccine is as safe as any other biological used in communicable disease control.

It is of interest to note in Table 10 that no paralytic cases occurred following a full course of three injections. A special study was made during the three-month summer period to obtain more exact rates of paralytic polio for the vaccinated and unvaccinated population. The results, as shown in Table 11, indicate a definite protective effect of vaccination, which increases with the number of injections given. These data must be taken with some reservation because of inherent difficulties in obtaining accurate and complete reporting and estimating the population at risk.

Difficulties in diagnosis were well illustrated by 30-day follow-up reports received from county health officers which indicated the clinical diagnosis of nine cases reported in vaccinated children were changed to "not polio." This was 10 per cent of the total 92 original cases reported in vaccinated children. The Virology Laboratory of the State Board of Health was able to isolate polio virus from only 9 of the 42 stool specimens submitted from these children, and in only 21 of 45 blood specimens submitted were polio antibodies of significant titer found. It was of considerable interest that 11 of 20 blood specimens had significant titers of antibody against mumps, indicating the possibility of a recent infection. A critical review of all the evidence would undoubtedly further decrease the number of cases of poliomyelitis occurring in vaccinated children. However, the same criterion should also be applied to the cases occurring in unvaccinated children, and this was not possible due to lack of laboratory specimens.

OTHER ROUTINE MORBIDITY SURVEILLANCE

Although total cases of typhoid fever remained essentially unchanged (Table 13), new interest in typhoid was stimulated by a program of phage typing all known typhoid carriers. Of the 92 known carriers, 35 were phage typed during 1956 by the Communicable Disease Center, Enteric Disease Laboratory, Chamblee, Georgia. It is hoped the remainder will be typed in 1957. The number of individual phage type reports obtained on carriers is as follows: A - 3, B1 - 2, C1 - 4, D1 - 2, E1 - 6, F1 - 1, F2 - 1, N - 3, Degraded Vi - 8, W form - 2, Type 34 - 1, Type 38 - 1, Untypable - 2, D Group Utrecht IX - 1. This phage typing information was used during the year to show that there was no association between an outbreak of several cases of typhoid in one small rural area.

Increased reported cases of mumps, measles, and influenza were noted, but due to the change in reporting as described above, these increases probably do not reflect true increased numbers of cases of this magnitude. Despite the change in reporting, numbers of reported cases of whooping cough and streptococcal infections fell

from 1955 and this undoubtedly indicates true decreases in actual cases. Increased reports of Salmonellosis and bacillary dysentery were largely due to efforts of the epidemiology staff in getting positive laboratory reports recorded in the morbidity statistics. The downward trend in reported cases of infectious hepatitis, which began in 1955, continued through 1956.

Other routinely reported diseases showed no essential changes. All eleven reported malaria cases were of foreign origin. Tetanus and meningitis remain the leading causes of death from communicable diseases in Florida, other than tuberculosis, venereal disease and pneumonia. Although several deaths are reported each year as due to encephalitis, these are not laboratory confirmed cases of the known viral encephalitides.

SPECIAL INVESTIGATIONS AND UNUSUAL OUTBREAKS OF DISEASE

During January and February, nine infant diarrhea deaths occurred in the Belle Glade area in Florida, and 13 cases of amoebic dysentery were reported by local physicians. A special investigation was made in an attempt to determine whether there was any association between the cases and deaths, as well as the general pattern of enteric disease in this area at that time. It was concluded that there was an unusual amount of amoebic dysentery, particularly for children, in the area but no common source or carrier was found. Enteric disease in this significant farm labor area presents a problem of inter-state importance since both the migrants and the raw vegetables they harvest are widely distributed over the northern states.

In the spring, the Leon County Health Department reported an outbreak of an unusual exanthematous disease in school children. The subsequent investigation showed this to be Erythema infectiosum, or Fifth Disease. Distribution of this information to other health officers in Florida resulted in the observation of a similar outbreak in Okaloosa county.

In April 1956, the Charlotte County Health Department notified the bureau of an outbreak of an unusual neurological disease. A preliminary investigation revealed the symptomatology to be remarkably similar to that observed in the Tallahassee outbreak in 1954. The illness was characterized by rather abrupt onset of headache, myalgia of the cervical, thoracic and spinal musculature, incoordination, and disturbance of mood and mentation. A total of 144 cases were found or reported over an interval of three months. The disease was again selective in severity for adult white females. Upon invitation, this outbreak was intensively studied by the U. S. Public Health Service Epidemic Intelligence Service. Despite an exhaustive search, no laboratory evidence of an infectious agent was uncovered in either the Florida State Board of Health or the USPHS

Virology laboratories. An interesting clue of unknown etiologic importance was found in the epidemiologic investigation by the nutritionist from the Division of Nutrition. Of twenty-three patients with the illness interviewed, only three received the recommended Vitamin C allowance in their daily diet. None of the twenty-three received the recommended amount of Thiamine. No epidemiologic associations were found with water, milk, food or drug injection, contact with animals or insects, nor were especial occupational or environmental risks demonstrated. The tendency of this disease to invoke emotional disturbances during a prolonged convalescence is perhaps its most baffling and important aspect, meriting further careful studies.

During the summer of 1956 a special survey for tuberculin sensitivity was made at the Florida Farm Colony in Gainesville. The major purpose was to evaluate the sensitivity of the patch test, using the intra-dermal Mantoux with intermediate strength PPD as a reference standard. 83.9 per cent agreement between the two methods was found. Of those tested where disagreement was found, 14.5 per cent were Mantoux positive and patch negative. This apparent decreased sensitivity of the patch test varied directly with age. 5.8 per cent of the 5-14 age children had "false" negative patch tests, compared with 31.0 per cent of the over 25 age group. Since in addition, 23 per cent of the original patch tests applied were accidentally lost by the children, it was concluded that the patch test is not as accurate or practical as the intradermal Mantoux for testing tuberculin sensitivity in Florida school children.

In the fall a special study to evaluate the effectiveness of a new adenovirus vaccine was instituted in cooperation with the Bureau of Laboratories. 117 volunteers were recruited from the central offices of the State Board of Health and half were given an injection of the new vaccine, the other half receiving a harmless placebo. The occurrence of upper respiratory illness, including extensive virological and bacteriological studies by the laboratory, is being recorded over the winter months, in order to evaluate the effectiveness of the vaccine in preventing upper respiratory illness.

EPIDEMIOLOGIC STUDIES IN NON-COMMUNICABLE DISEASE

Under a grant from the National Heart Institute, the Epidemiologist and State Health Officer were responsible in 1956 for directing a study of the epidemiologic factors associated with the increasing ratios of male vs female mortality. A research committee representing vital statistics, psychology, sociology and epidemiology developed an interview format designed to determine any differences that might exist in parental attitudes towards boys and girls which might later affect their morbidity and mortality. Families of boy-

girl twins born in Florida in 1949, 1950 and 1951 are being studied. This study is in process, and incomplete data preclude any conclusions at this time.

The epidemiology of accidental poisoning in children was the subject of considerable time and activity by the staff in 1956. In cooperation with the Florida Pediatric Society, The Florida Chapter of the American Academy of Pediatrics and the County Health Departments, assistance was given toward establishing a statewide network of Poison Control Centers in 15 strategically located cities throughout the State. The pediatricians in each city established a treatment center in the accident room of a hospital, centered around a file of 1500 common household products and their poisonous ingredients. This file was prepared and distributed to the centers by Dr. Robert Grayson, a Miami pediatrician, and his local committee. Cases of poisoning seen in the centers are referred to county health departments for follow-up home visits. All data regarding the case is recorded on forms prepared by the epidemiology staff. This information on these forms is coded and tabulated, and used as a basis for preventive programs. The first tabulation for the 267 forms received during 1956, from all the centers in operation is shown in Table 4. The accumulation of this epidemiologic information on accidental poisoning in children will be used to aid in the prevention of such accidents, and it is hoped, will serve as a stimulus for interest in general accident prevention activities.

Articles by staff members:

- Bond, J. O. The Effect of Vinegar on the Growth of Enteric Bacteria in Evaporated Milk Mixtures. *J. Pediat.* 49: 708-715, Dec. 1956.
- Bond, J. O. "Tallahassee-Punta Gorda Encephalomyelitis." *Electrolyte* 2:10, Oct. 1956.

Age	Population	NUMBERS OF POPULATION VACCINATED				PER CENT OF POPULATION VACCINATED			
		1 or More Injections	3 Injections	2 Injections	1 Inj. Only	1 or More Injections	3 Injections	2 Injections	1 Inj. Only
0-4	406,761	177,735	42,692	116,173	18,870	43.7	10.5	28.5	4.6
5-9	370,907	267,947	96,461	124,792	46,694	72.2	26.0	33.6	12.6
10-14	277,315	100,672	35,072	57,265	8,335	36.3	12.6	20.6	3.0
15-19	199,386	28,868	4,573	18,900	5,395	14.5	2.3	9.5	2.7
Under 20	1,254,369	575,222	178,798	317,130	79,294	45.9	14.3	25.3	6.3
20-40	1,054,145	30,400	3,631	19,843	6,926	2.9	0.3	1.8	0.6
Under 40	2,308,514	605,622	182,429	336,973	86,220	26.2	7.9	14.6	3.7

REPORTED INJECTIONS OF SALK VACCINE FROM FEDERAL OR NFIP SOURCES
FLORIDA, APRIL 1955 THROUGH DECEMBER 1956

TABLE 9

TABLE 10

REPORTED CASES OF POLIOMYELITIS IN VACCINATED
CHILDREN — FLORIDA, 1956

Vaccination Received	Onset Less Than 30 Days After Inoculation				Onset Over 30 Days After Inoculation				Totals*			
	Par.	Non-Par.	Uns.	Tot.	Par.	Non-Par.	Uns.	Tot.	Par.	Non-Par.	Uns.	Tot.
1	3	6	1	10	2	3	---	5	6	13	2	21
2	2	4	---	6	4	19	2	25	9	32	4	45
3	0	2	---	2	0	3	1	4	0	9	5	14
Unk.	---	---	---	---	---	---	---	---	---	---	3	3
Total	5	12	1	18	6	25	3	34	15	54	14	83

*Total includes 31 cases with interval between inoculation and onset unknown

TABLE 11

REPORTED CASES OF POLIOMYELITIS UNDER AGE 20 IN FLORIDA,
JUNE 1, 1956 TO SEPTEMBER 1, 1956 BY VACCINATION
STATUS — BY PARALYTIC STATUS

Vaccination Status	Average Population At Risk	CASES				Rates per 100,000	
		Par.	Non-Par.	Uns.	Tot.	Par.	Tot.
One inoculation	91,605	3	5	---	8*	3.3	8.7
Two inoculations	269,806	2	18	1	21	0.7	7.8
Three inoculations	73,566	0	4	---	4	---	5.4
Total vaccinated	434,977	5	27	1	33	1.1	7.6
Total unvaccinated	819,392	38	34	13	85	4.6	10.4
Grand Total	1,254,369	43	61	14	118	3.4	9.4

*Includes five cases with onset thirty days or less after vaccination.

TABLE 12
REPORTED CASES OF ACCIDENTAL POISONING, FLORIDA 1956

Race and Sex	Type of Poison												
	Total	Unknown	External Medicine	Internal Medicine	Cleaning Agent	Petroleum	Turpen- tine	Cosme- tics	Insecti- cide	Rodenti- cide	Herbi- cide	Poison Plant	Other
	287	12	12	100	30	50	5	2	38	1	1	12	4
Unk.	11			5	2	4							
W-M	101	6	4	31	12	17	2		20	1		6	2
W-F	112	4	3	60	7	14	2	2	13			5	2
C-M	22	1	1	2	3	9	1		4			1	
C-F	21	1	4	2	6	6			1		1		
Age													
O-4	208	5	5	75	24	44	4	2	34	1	1	9	4
5-9	5		2		1	1						1	
10-14	1					1							
15-19	8	1	1	5	1								
20+	36	6	4	17	4	4	1		2			2	
Unk.	9			3					2				

TABLE 13

CASES OF CERTAIN REPORTABLE DISEASES, FLORIDA, 1946-1956

DISEASE	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
anthrax	0	0	0	0	0	5	0	1	0	0	0
brucellosis	81	67	74	86	36	10	10	10	9	12	12
cancer	1,041	1,025	1,880	4,394	5,090	5,057	5,333	5,717	5,640	5,852	6,591
chancroid	818	745	388	343	248	317	462	328	344	388	273
chickenpox	959	1,969	1,402	2,841	1,945	2,603	1,261	1,900	2,144	3,241	2,256
Chengue Fever	1	0	1	0	0	1	0	2	0	0	0
Diarrhea of Newborn	51	67	191	134	113	60	143	96	106	158	288
Diphtheria	361	283	327	206	97	66	82	114	114	99	102
Dysentery, Amebic	79	59	153	135	113	88	161	177	102	144	139
Dysentery, Bacillary	45*	16*	219*	77	50	47	235	53	48	68	83
Encephalitis, Viral	14	4	5	10	9	12	9	13	19	15	15
German Measles	153	64	56	43	45	214	304	305	126	190	205
Gonorrhea	18,548	20,160	18,820	15,388	14,185	12,709	11,809	11,459	11,841	12,146	10,991
Granuloma Inguinale	257	271	773	827	446	417	233	109	71	69	73
Hansen's Disease	8	2	11	0	3	2	2	1	2	2	2
Hepatitis, Infectious	32	24	66	4	27	46	236	301	303	262	152
Hookworm	3,805	4,605	5,008	6,636	10,051	6,561	6,611	4,206	4,772	3,551	2,659
Influenza	227	1,083	366	258	235	584	218	1,406	279	157	219
Leptospirosis	0	0	0	0	1	1	0	1	1	1	0
Lymphopathia Venerea	176	216	197	127	34	40	120	96	55	51	55
Malaria	503	135	111	43	7	23	50	19	11	13	11
Measles	3,491	1,315	4,802	3,753	2,499	2,431	4,072	1,316	10,766	1,495	5,186
Meningococcal Infections	77	49	48	41	53	92	88	102	96	88	69
Mumps	1,592	914	1,329	1,791	1,452	2,101	1,985	1,112	1,516	1,933	4,353
Ophthalmia Neonatorum	20	30	26	11	22	14	20	7	17	16	22
Pneumonia	772	663	551	686	624	727	707	959	747	731	695
Poliomyelitis	577	111	285	282	471	362	663	733	1,777	466	364
Rabies, Animal	59	438	332	75	38	11	20	58	84	77	62
Ringworm of the Scalp				1	6	6	50	103	196	167	
Rocky Mt. Spotted Fever	0	2	0	0	0	2	2	0	2	1	0
Syphilis	105	132	135	150	39	120	78	91	63	223	156
Scarlet Fever***	413	441	485	384	277	456	460	592	632	726	647
Smallpox	16,067	16,653	15,395	12,363	10,738	9,445	10,824	6,722	6,894	5,541	7,182
Staphylococcus	40	27	73	71	43	34	46	44	59	53	47
Tetanus	0	0	0	0	1	0	1	1	0	1	0
Tuberculosis	2,437	4,335	3,313	3,198	2,337	2,590	2,603	2,424	2,461	2,253	2,453
Malaria	7	8	19	29	18	6	18	7	3	5	2
Typhoid Fever	66	66	103	51	30	23	36	41	31	56	60
Typhus Fever	397	340	166	123	34	20	11	10	5	11	6
Whooping Cough	1,029	1,861	731	191	471	920	291	209	339	1,080	547

*Includes other and unspecified.
*Includes Paratyphoid Fever.
*Includes Streptococcal Infection.

DIVISION OF INDUSTRIAL HYGIENE

JOHN M. McDONALD, M.D., M.P.H.,
Director

LABORATORY

Air pollution contaminants, their collection and subsequent analysis, have been the major problem throughout the year. In the case of fluoride contaminants alone, 104 determinations have been made. In addition, a large number of field tests were made; for example, air temperatures, humidity and sulfur dioxide levels were checked.

Industrial occupational health studies, surveys and routine analyses have been conducted consistent with available time. In basic occupational health practice, 277 chemical analyses were made of which 160 were for determination of lead in blood or urine. To this should be added 43 control determinations to provide accuracy of analysis. One study of special interest was done to estimate whether an exposure to dichlorobenzene was hazardous to employees of the State Plant Board.

AIR POLLUTION

The 1955 air pollution study around the phosphate processing plants in Polk County was continued. As before, air samples were taken in the vicinity of the plants, checking for the presence of fluorine compounds and sulfur dioxide. It became apparent that unless this procedure could be undertaken on a larger scale the study would be unduly prolonged. Because of public pressure for immediate action, it was decided to take samples directly from the plant stacks. In this way it was possible to get reasonably accurate information about the amount of fluorine discharged by each company. By the end of the year, stack sampling had been carried out in four plants.

Many difficulties were encountered in this sampling. In some cases the work had to be repeated because of variations in plant processes. In other cases sampling points were difficult of access. In addition, the chemical analysis for fluorine compounds is a tedious and complicated procedure requiring much more time than taking an air sample.

During the course of this study it became apparent that another potential source of air pollution was present, namely, the products of combustion of fuel oil. Large quantities of fuel oil are burned in drying phosphate rock and concentrating phosphoric acid. It is possible that these partially burned products of combustion are the cause of the eye and throat irritation complained of by nearby residents. The possible effects of these pollutants as well as the potential air pollution from rock drying plants remain to be investigated.

On the basis of information obtained so far, it can be said that at least partial control of the emission of fluorine compounds has been attained. Also because of the rapid increase in commercial uses for fluorine, several plants are now recovering it in substantial amounts for sale. This recovery may be expected to increase, thereby reducing air pollution from this source.

EDUCATION

The director was appointed Visiting Assistant Professor of Preventive Medicine at the University of Miami School of Medicine. Two lectures were given to junior medical students.

CONSULTATION SERVICES

Among the increased numbers of consultation services rendered were several of special interest. Requests for assistance came from Gadsden County about a rendering plant; Polk County: cypress knee plant; Seminole County: concrete block plant; Duval County: oil recovery plant; Hillsborough County, on potential contamination of processed citrus peel by insecticides; Bay County: odor and discoloration in water; Palm Beach County: use of parathion on lawns; Broward, Dade and Pinellas counties: malathion spraying for Mediterranean Fruit Fly.

Assistance was given to the Jacksonville City Health Department in setting up a study on the sanitary conditions in barber shops, and also in an investigation into the odors arising from shell molding.

SPECIAL STUDIES

At the request of the Atomic Energy Commission and the Public Health Service, the Division operated a monitoring station for detecting air-borne radiation. A large volume air sampler was kept in operation for 24 hours a day for about six months. Beta activity readings were made on each filter using a Geiger Muller Survey Meter, before forwarding to the central office. Adhesive plastic film was also exposed every day. Changing films and filters, and making reports required about one man-hour per day.

PERSONNEL

Mr. R. B. Hull joined the staff as industrial hygiene chemist on March 1. He attended a two weeks training course for chemists at the Occupational Field Headquarters of the Public Health Service in Cincinnati. Because of illness, Mr. R. L. Hebblethwaite left the Division in August for prolonged hospital treatment, and had not returned by the end of the year.

COOPERATION WITH THE FLORIDA INDUSTRIAL COMMISSION

Further assistance was rendered to the Florida Industrial Commission in the revision of their regulations for the control and prevention of occupational diseases in industry. At the request of the Commission, a study was made in a small electric utility powered by diesel engines in order to determine whether or not the operation of the engines caused the formation of carbon monoxide in toxic amounts in the engine room. Help was also asked in the prevention of cement dermatitis.

MISCELLANEOUS ACTIVITIES

Because of the growing interest in air pollution, the director joined the Air Pollution Control Association and attended its annual meeting in Buffalo. The director and chemist also attended the American Conference of Governmental Industrial Hygienists' annual meeting in Philadelphia.

Two meetings of the Legislative Committee on Air Pollution were attended. The director attended the annual Sanitary Engineering Conference in Gainesville and also was present at a meeting in Cincinnati on Administration of Air Pollution Programs. He took part in the Southern Regional Education Board meeting in St. Petersburg to discuss the industrial applications of nuclear energy. No pollen counting was done, but the mold study was carried on for the first four months of the year.

Requests for information about the Florida climate continued to increase. A total of 107 letters were answered on subjects ranging from pollen counts to the effect of the climate on arthritis and other chronic ailments.

Articles by staff members:

McDonald, J. M.: Industrial Hygiene in Florida. Natl. Eclectic Medical Quarterly. 47: 7-8, March 1956.

TABLE 14
SUMMARY OF INDUSTRIAL HYGIENE ACTIVITIES
1956

Number of industrial establishments given service.....	88
Number of workers affected by services.....	2869
Number of other places and areas visited.....	23

Number of field visits made:

Planned or self-initiated.....	47	Occupational disease reports.....	3
Requests and complaints.....	8	Revisits.....	32
Agency referrals.....	38	Total.....	128

Plant Environmental

Services:	No. of Visits
Routine inspection.....	18
Industrial hygiene survey.....	16
Technical study of hazards.....	32
Consultation only.....	12
Follow-up on recommendations.....	14
All other.....	24
Total.....	116

Other Technical Investigations:

Air pollution.....	11
Radiation surveys (non-indust).....	4
Non-occupational problems.....	9
Total.....	24

Environmental

Recommendations:	
Number made.....	9
Number complied with.....	3

Field Determinations:

Atmospheric contaminants.....	47
Radiation monitoring.....	2
Total.....	49

Laboratory Analyses:

Routine.....	13
Air pollution.....	104
Biological.....	160
Total.....	277

Occupational diseases investigated.....	13
Occupational diseases reported.....	827

RELATED ACTIVITIES

Office consultation services and inquiries handled	96	
Lectures given 9	Demonstrations 4	Attendance 241
Meetings attended 16		

DIVISION OF TUBERCULOSIS CONTROL

C. M. SHARP, M.D.,
Director

The year 1956 has been a year of great change in the field of tuberculosis control. The impact of a situation in which there were adequate hospital beds for treatment of the disease and the development and extensive usage of anti-tuberculosis drugs made itself felt in decreased hospital stay for many patients in most of our hospitals. The availability of drugs for the outpatient treatment of patients after discharge has probably gone a long way toward preventing reactivation of this relapsing disease.

As an example, the preliminary analysis of the central tuberculosis case register from July, 1955 through December, 1956 indicates that

2467 patients were discharged from our state tuberculosis hospitals, which is approximately 30 per cent more rapid turnover of patients leaving with advice than any similar period. On the other hand, there have been fewer relapses of patients after discharge. Of the 2467 patients discharged in the period mentioned above, only 6.7 per cent have shown reactivation according to the central case register. If, however, we consider that 107 of the 167 patients showing reactivation of their disease were discharged from the hospital against medical advice, and consider only the 60 patients given medical discharges, we arrive at the rather startling fact that in this 18 month period only 2.5 per cent of the discharged patients who have been followed by this office showed evidence of reactivation. One must consider, however, that for the last six months of 1956 follow-up information is rather meager, since there is usually a six months period before information is received on discharged patients. So, in reality, the above figures would represent a period of approximately twelve months. (See Table 21).

The above facts, together with the slowly decreasing number of cases being found in surveys accounts for the vacant beds in our hospitals. As a result of these vacancies the Budget Commission appropriated \$80,000 with which to accelerate case-finding activities. Two more mobile X-ray units with generators were purchased and the older equipment renovated, giving a total of six units for state-wide chest X-ray surveys.

With the stepping up of X-ray survey activities there has been an increase in case finding and hospital admissions, and it is estimated that by July 1957 there will again be waiting lists for Florida's tuberculosis hospitals due to surveys now being conducted in large population areas in south Florida.

MORTALITY

Table 15 reveals the death rate for tuberculosis for certain years, going back to 1920. The death rate from the disease decreased from 7.7 per 100,000 in 1955 to 6.3 in 1956. It is particularly gratifying to note that the death rate continues to drop very rapidly in the negro group from 14.6 per 100,000 in 1955 to 11.9 in 1956. The reason for this is the rapid and satisfactory manner in which the tuberculosis process responds to drug therapy in the negro race and the availability of adequate beds for treatment. We still predict that by 1963 the death rate for both races should be about the same if the rate of decrease continues as it has over the past four years. When one considers the year 1948 (before drugs were generally available to most patients) there was a death rate of 27.8 per 100,000, and compare it with the death rate of 6.3 for 1956, one can see that the death rate since 1948 has declined 77.3 per cent. This is indeed good news.

MORBIDITY

The true picture of the tuberculosis problem cannot be told by declining death rates alone. The disease is still with us as shown in Table 16. In this table we have combined the decrease in morbidity with the decrease in mortality for the years 1948-1956. Here we have a different story. The morbidity rate has declined from 128.0 per 100,000 to 63.3, or 50.5 per cent.

The number and percentage of reported cases for 1955 and 1956 is shown in Table 17. It will be noted that the number of newly reported cases increased because of the increase in survey activity. 2453 cases were reported in 1956 as against 2253 in 1955.

The increase in cases reported for 1956 over 1955 does not reflect a real increase in cases, but rather an increase in case finding activities which we feel will in the future decrease more rapidly and permanently as larger segments of the population are examined by X-ray surveys.

There was a decided improvement in the number of far advanced cases, reported, and we still find the highest incidence in the age group over 45, which includes approximately 50 per cent of the tuberculosis problem in white males alone.

Another very encouraging feature noted in Table 17 is that the number of cases first reported by death certificate decreased from 72 in 1955 to 59 in 1956, a decrease to 2.4 per cent of all reported cases as against 3.2 per cent in 1955. This has always provided a very valuable epidemiological index.

CASE FINDING

The major portion of the activity of this division can be attributed to mass community-wide chest X-ray surveys. Due to the availability of additional personnel and equipment, as well as to the improvement in the technique of community organization, we have seen the total number of persons examined by X-ray surveys increase from 559,555 films in 1955 to a total of 742,652 films in 1956. This increase can be wholly attributed to activities of the units of this division since several thousand less films were made by local units; units operated by the division increased by 194,225 the number of persons examined.

Not only have more people been examined, but a larger percentage of the population has been examined, and a more productive group has been reached. For instance, in 1956, 42 per cent of the population was examined by the state units in communities where X-ray surveys were conducted as compared to only 31 per cent in 1955. In addition 85 per cent of those with suspicious films has had follow-up X-rays along with clinical study as compared to 82

per cent in 1955. As a result 669 new significant cases of tuberculosis were uncovered directly as a result of surveys, and at least an equal number indirectly from contact examinations. Also, 605 old cases were again brought under follow up. Of the new cases found 172 were considered to be minimal, 348 moderately advanced and 117 far advanced. Of the total cases demonstrated 475 were considered active cases. Hospitalization was recommended on the majority of the active cases. Of the old cases again brought under follow up 59 were considered to have reactivated, requiring hospitalization.

In spite of the increase in cases found the new case rate per 100,000 decreased from 105.4 in 1955 to 90.7 in 1956 due to the fact that more people were examined.

As a direct result of the surveys a total of 335 persons were given hospitalization, or about one for every 2000 persons examined. If, however, the active cases found are considered, one active case for every 1500 persons X-rayed was discovered, and there was approximately one case of active and inactive disease uncovered for each 1000 persons X-rayed.

A large amount of pathology other than tuberculosis continues to be found as a significant by-product of tuberculosis case finding. Such conditions as heart disease, tumors and other pathology are shown in Table 18.

We cannot give enough credit to the invaluable assistance given by the local tuberculosis associations in organizing these surveys. They have not only spearheaded the organization of communities, creating the awareness of the need for X-ray examination of presumably well population groups, but they have greatly assisted financially by providing volunteer workers to assist in registering the individuals receiving X-ray examinations, and by paying for the publicity used in the surveys as well as for the negative report cards sent to each individual X-rayed.

CONSULTATION AND DIAGNOSTIC CLINICS

An analysis of the 14 x 17 inch diagnostic and consultation X-rays (Table 19) shows an increase of 605 in the total films taken. A total of 4631 films were interpreted as showing tuberculous pathology in 1956 as against 3642 in 1955.

When one considers these interpretations by activity there were 1142 "probably active" or active cases in 1956 as compared with 766 in 1955. This accounts to a large degree for the fact that the hospitals are rapidly filling to normal capacity.

CENTRAL TUBERCULOSIS CASE REGISTER

As usual a great part of the activity of this division is taken up by compiling case records in a central tuberculosis case register.

Table 20 shows comparison of the cases in the register for the past five years. Of the 3875 active cases in the register 2022 are hospitalized as against 1853 who reside at home. Many of these active cases residing at home are on drugs and are considered active cases because of so-called "healed" cavities; but it is distressing to learn that in spite of empty beds in our tuberculosis hospitals 394 patients reside at home with positive sputum.

Table 21 shows the number of active cases at home with positive sputum by counties. In reviewing this table there has been very little change over 1955. It is hoped that the local health authorities will see that positive sputum cases now at home are soon hospitalized. In addition, there are still 32 per cent of the cases on the register whose sputum is undetermined, which indicates rather poor follow up by the local health departments.

In regard to patients, who have relapsed after discharge from the hospital, an individual study is being made to determine the number who have shown relapse where no information is available on the register.

ACTIVITIES IN LOCAL HEALTH UNITS

As a result of the development of outpatient chemotherapy along with the continuing mounting backlog of tuberculous patients, there has been a proportionate increase in the activities of local health units. This year there has been a total of 2845 active cases admitted to service in local health departments and an additional 5143 inactive cases who must be followed up, many of whom are on outpatient chemotherapy. Also admitted to service were 17,829 contacts and suspects.

Of the total cases admitted to hospitals 1675 were admitted through local health departments, or approximately 90 per cent of all admissions.

TUBERCULOSIS HOSPITALS

The number of empty beds in tuberculosis hospitals has gradually decreased over the past few months. There are approximately 100 more patients in the hospitals as of February 25, 1957 as compared with the same date in 1956. If case finding of tuberculosis continues at the current rate there would seem to be little reason why all of the tuberculosis hospitals should not be filled to capacity. If the 394 positive sputum cases at home were hospitalized we would again have a waiting list.

There is little justification at this time for the rumour which advocates closing one of these hospitals. Tuberculosis still it, and will continue to be for some time to come, our principal public health problem.

TABLE 15

DEATHS FROM TUBERCULOSIS (ALL FORMS) AND DEATH RATES
PER 100,000 POPULATION BY COLOR,
Florida, Selected Years

YEAR	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
1956*	244	6.3	157	5.0	87	11.9
1955	281	7.7	175	6.0	106	14.6
1954	283	8.1	159	5.7	124	18.1
1953	303	9.7	171	6.9	132	20.7
1952	501	16.7	250	10.5	251	40.0
1951	518	17.9	279	12.2	239	38.7
1950	522	18.7	254	11.6	268	44.1
1945	708	31.1	339	19.7	369	66.2
1940	973	50.8	375	26.8	598	115.6
1935	908	56.0	395	34.3	513	109.4
1930	1,015	68.6	432	41.3	583	134.0
1925	999	80.8	426	50.0	573	148.7
1920	1,016	102.3	423	64.3	593	176.8

* Preliminary
Note: Deaths and rates, 1930, 1925 and 1920 are by place of occurrence. Other years by place of residence.

TABLE 16

TUBERCULOSIS CASES REPORTED, CASE RATES,
DEATHS, & DEATH RATES
FLORIDA, 1948-1956

Year	Cases Reported	Case Rate	Deaths	Death Rate
1948	3,313	128.0	720	27.8
1949	3,198	118.7	659	24.4
1950	2,337	83.5	522	18.7
1951	2,520	86.8	518	17.8
1952	2,603	86.5	501	16.6
1953	2,424	77.9	303	9.7
1954	2,461	70.6	283	8.1
1955	2,253	61.4	281	7.7
1956	2,453	63.3	244	6.3

TABLE 17

NUMBER AND PERCENTAGE OF REPORTED TUBERCULOSIS CASES BY
STAGE OF DISEASE, RACE AND SEX, AGE AND SOURCE OF REPORT.
FLORIDA 1955 AND 1956

Stage of Disease, Race and Sex, Age and Source of Report	1955		1956	
	Cases	Percent	Cases	Percent
TOTAL CASES	2,253	100.0	2,453	100.0
STAGE OF DISEASE				
Primary	41	1.8	73	3.0
Minimal	396	17.6	348	14.2
Moderately Advanced	853	37.8	993	40.5
Far Advanced	657	29.2	634	25.8
Non-Pulmonary	51	2.3	59	2.4
Unknown	255	11.3	346	14.1
RACE AND SEX				
White Male	1,035	45.9	1,124	45.8
White Female	544	24.2	570	23.2
Colored Male	424	18.8	447	18.2
Colored Female	240	10.7	266	10.9
Unknown	10	0.4	46	1.9
AGE				
Under 5	58	2.6	57	2.3
5-14	28	1.2	50	2.0
15-24	168	7.5	164	6.7
25-44	834	37.0	871	35.5
45-64	779	34.6	844	34.4
65 Plus	341	15.1	400	16.3
Unknown	45	2.0	67	2.8
SOURCE OF REPORT				
Health Department	1,507	66.9	1,677	68.4
Sanatoria	249	11.0	322	13.1
Private Physicians	56	2.5	42	1.7
General Hospitals	17	.8	23	.9
Out-of-State	141	6.3	151	6.2
Death Certificates	72	3.2	59	2.4
Veterans Hospitals	183	8.1	150	6.1
Florida State Prisons	18	.8	24	1.0
Florida State Hospitals	5	.2	1	.0
U. S. Recruiting Stations	5	.2	4	.2

TABLE 18
RESULTS OF 70mm X-RAY SCREENINGS AND 14" X 17" FOLLOW-UP
FILMS ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1956

RACE AND SEX AGE, AND COUNTY	70mm X-RAYS										14-in. x 17-in. X-RAY FOLLOW-UP FILMS										ALL FILMS																							
	Film Impressions										FINDINGS																																	
	Total Films (a)		Percent of Population (b)		Definite or Suspected Tuberculosis		Other Pathology		Negative		Total Films		Percent Follow-up (c)		New Cases		Old Cases		Suspected Tuberculosis		Other Pathology		Diagnosis Reserved		Negative		By Stage				By Activity				New Case Rate (d)		Active Old Cases		Cardiovascular		Tumor		Other Pathology	
																											Advanced		Moderately Advanced		Far Advanced		Primary and Unknown											
	MASS SURVEY X-RAY SCREENINGS WITH 14 X 17 FOLLOW-UP																																											
GRAND TOTAL																																												
SUB-TOTAL																																												
RACE AND SEX																																												
White Male																																												
White Female																																												
Colored Male																																												
Colored Female																																												
Unknown																																												
AGE (c)																																												
15-24																																												
25-34																																												
35-44																																												
45-54																																												
55-64																																												
65 and over																																												
Unknown																																												
COUNTY																																												
Alachua																																												
Baker																																												
Bradford																																												
Brevard																																												
Charlotte																																												
Citrus																																												
Clay																																												
Columbia																																												
Duval																																												
Flagler																																												
Franklin																																												
Gadsden																																												
Gilchrist																																												
Gulf																																												
Hamilton																																												

FILMS ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1956

RACE AND SEX AGE, AND COUNTY	70mm X-RAYS				14-in. x 17-in. X-RAY FOLLOW-UP FILMS										ALL FILMS									
	Film Impressions				FINDINGS										NEW CASES FOUND									
					By Stage																			
	Percent of Population (b)				By Activity										Cardiovascular				Tumor					
					Minimal				Moderately Advanced				Primary and Unknown										Active and Prob. Active	
Total Films (a)	Percent of Population (b)	Definite or Suspected Tuberculosis	Other Pathology	Negative	Total Films	Percent Follow-up (c)	New Cases	Old Cases	Suspected Tuberculosis	Other Pathology	Diagnosis Reserved	Negative	Minimal	Moderately Advanced	Far Advanced	Primary and Unknown	Active and Prob. Active	Inactive and Prob. Inactive	Hospitalization Recommended	New Case Rate (d)	Active Old Cases	Cardiovascular	Tumor	Other Pathology
Jefferson	1,906	29.0	6	23	1,877	66.7	14	12	11	1	8	3	4	7	1	2	9	5	8	70.4	11	13	11	11
Leon	19,896	44.6	229	206	19,461	72.1	13	13	2	4	2	95	1	1	1	1	1	2	1	135.4	11	80	29	220
Levy	2,215	33.0	22	29	2,164	81.8	18	18	1	1	7	7	1	1	1	1	1	2	1	1	10	10	3	3
Liberty	432	24.6	1	5	416	15	0	3	3	1	1	3	3	2	1	2	3	6	3	93.3	1	25	1	22
Madison	3,216	30.0	19	45	3,152	78.9	3	3	1	4	1	16	3	3	1	2	8	6	4	309.8	1	78	5	91
Manatee	12,749	38.8	78	171	12,500	73.3	14	4	1	3	6	3	3	9	4	1	4	4	4	35.9	1	53	4	4
Marion	11,134	33.9	45	135	10,954	73.3	4	4	1	13	3	2	3	2	1	1	3	3	3	104.6	3	15	2	20
Martin	2,869	38.2	21	33	2,815	57.1	3	5	1	10	1	9	1	1	1	1	2	1	3	41.1	3	17	10	20
Nassau	4,865	43.6	39	37	4,789	74.4	2	2	1	1	1	1	1	1	1	1	1	1	1	149.4	1	12	12	21
Okeechobee	1,339	42.6	17	47	1,307	83.3	2	3	1	4	1	2	2	1	1	1	1	2	55	111.0	24	6	21	
Oscola	2,702	77.6	17	47	2,638	76.5	3	2	72	77	42	855	2	38	15	1	55	4	2	46.2	2	436	169	732
Pinellas	119,057	70.6	1,836	1,250	115,971	88.1	55	87	4	13	6	10	1	10	2	1	4	4	2	78.3	3	40	5	25
Putnam	5,109	23.1	28	51	5,030	79.7	9	20	4	3	1	3	1	2	1	1	5	4	2	100.7	3	66	1	63
St. Johns	8,940	38.5	75	80	8,782	49	65.3	12	5	19	4	10	1	7	2	6	6	6	7	129.6	2	87	15	108
St. Lucie	9,260	43.5	75	111	9,074	65.3	15	14	7	3	8	10	2	11	2	9	9	6	7	95.0	2	16	3	18
Sarasota	15,786	49.7	95	175	15,516	89	81.0	1	1	9	2	2	1	1	1	1	1	1	28.5	1	8	8	5	
Taylor	3,514	38.4	21	28	3,465	17	37	2	2	1	1	1	1	1	1	2	16	21	9	148.6	2	82	29	197
Union	999	17.9	7	12	980	62.0	37	8	7	42	14	42	14	16	5	2	1	1	1	1	2	6	7	10
Volusia	24,894	37.9	242	266	24,386	150	1	1	1	1	1	1	1	1	1	1	1	1	1	35.5	1	6	1	10
Wakulla	1,086	32.3	3	12	1,071	0	1	1	2	1	1	1	1	1	1	1	1	1	1	14.5	1	7	1	8
Florida A&M Univ.	2,818	100.0	4	12	2,802	3	75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
Florida State Univ.	6,885	98.6	6	16	6,863	100.0	2	10	2	4	1	11	1	1	1	1	1	1	1	16.1	1	8	8	21
University of Florida	12,415	100.0	33	33	12,348	84.8	2	10	2	4	1	11	1	1	1	1	1	1	1	1	1	1	1	21

SUB TOTAL		320,246	17.2	3,799	3,873	312,574	2,403	64.8	259	330	150	576	250	838	86	97	60	16	204	55	150	82.3	14	1,473	274	2,702
Broward Health Dept.	28,617	19.7	371	392	27,854	196	52.8	18	7	15	3	44	75	4	9	3	2	15	3	8	21	62.9	1	296	18	125
Dade Health Dept.	19,217	3.6	635	276	18,306	518	81.6	33	37	60	21	69	144	12	10	11	2	28	5	20	171.7	8	179	17	292	
Dade TBC Ass'n	64,480	12.0	427	651	63,402	300	70.3	37	64	64	101	50	48	8	25	4	1	37	3	20	57.4	1	192	65	495	
Duval Medical Center	5,394	1.9	89	132	5,173	531	90.0	36	40	12	78	41	324	5	12	14	5	36	3	36	122.7	1	157	10	211	
Jacksonville Health D.	29,332	18.1	590	300	28,442	68	87.2	12	12	8	4	8	11	25	2	4	3	9	3	3	90.6	5	328	100	808	
Escambia Health Dept.	11,198	10.3	78	99	11,021	480	44.2	78	131	89	12	15	42	1	1	1	1	55	23	34	90.6	1	102	21	241	
Hillsborough Health D.	86,083	36.5	1,040	1,150	83,893	480	44.2	6	6	3	13	12	15	20	1	1	1	8	6	10	112.8	1	32	17	101	
Orange Health Dept.	20,766	14.9	285	352	20,149	91	34.3	14	8	8	20	9	1	1	1	1	1	4	1	5	44.5	1	36	10	99	
Palm Beach Health D.	12,413	10.1	82	130	12,201	64	78.0	14	5	5	9	1	1	1	1	1	1	1	1	1	1	1	1	1	204	
Palm Health Dept.	11,237	6.7	76	136	11,025	71	93.4	5	4	4	6	13	7	1	1	1	1	1	1	1	1	1	1	1	204	
Polk Health Dept.	31,509	27.0	146	255	31,108	104	71.2	20	4	4	6	13	7	1	1	1	1	1	1	1	1	1	1	1	204	

OTHER X-RAY SCREENINGS

(a) Excludes unsatisfactory films. Distribution by age, race and sex based on a 10% sample of films.
 (b) Based on estimated 1956 population 15 years and over in area surveyed.
 (c) Counties without follow-up excluded from totals.
 (d) Rate per 100,000 satisfactory 70mm. films. Totals exclude counties without follow-up.
 (e) Age, race and sex for 1,618 follow-up films in Pinellas County not available.

TABLE 19

FINDINGS OF CLINICS AND CONSULTATION (14 X 17) CHEST X-RAYS INTERPRETED IN 1956 BY SUBMITTING FACILITY, REASON FOR TAKING FILM, RACE AND SEX, AGE AND ACTIVITY. FLORIDA

Submitting Facility, Reason for Taking Film, Race, Sex and Age and Tuberculosis by Activity	Total Films	Negative	Tuberculosis Pathology by Stage						Suspected Tuberculosis	Non-Tuberculosis Pathology			Diagnosis
			Total	Minimal	Moderately Advanced	Far Advanced	Stage Unknown	Primary		Calcification	Other	Pathology	
TOTAL	20,399	12,567	4,631	1,210	2,235	354	681	151	312	636	926	1,000	
FACILITY SUBMITTING FILM													
Diagnostic X-ray Clinic	6,163	2,847	2,078	462	1,035	172	352	57	139	258	356	437	
County Health Department	10,838	6,825	2,286	694	1,027	156	316	93	157	348	494	530	
Private Physician	205	128	22	4	11	5	2	—	6	7	16	25	
General Hospital	487	410	8	1	3	1	2	1	3	9	33	28	
State Prisons	2,614	2,299	224	41	155	20	8	—	4	13	24	40	
Florida Farm Colony	57	41	3	1	2	—	—	—	3	—	1	—	
Other	35	19	10	7	2	—	1	—	—	1	2	—	
REASON FOR TAKING FILM													
Mass Survey Follow-Up	2,374	929	354	106	212	25	10	1	129	277	319	344	
Known Case Follow Up	4,114	30	3,908	1,025	1,857	270	645	111	4	44	14	80	
Suspect Follow-up	1,913	1,116	124	30	51	28	9	6	66	113	187	296	
Contact of Case	3,792	3,402	73	13	20	6	5	29	47	34	66	107	
Possible Source Case	65	58	3	—	2	—	1	—	—	2	—	4	
School Employee	347	328	1	1	—	—	—	—	—	7	3	20	
Food Handler, etc.	2,160	1,999	23	9	13	1	—	—	15	35	35	60	
Military Examination	67	59	1	—	1	—	—	—	—	1	—	4	
Prenatal	132	114	11	2	5	—	—	4	1	1	2	1	
Medical Personnel	284	269	3	2	—	—	1	—	—	1	8	23	
Other	5,151	4,263	130	22	74	24	6	4	50	121	292	230	
RACE AND SEX													
White Male	7,761	4,478	1,848	452	992	167	204	33	133	302	420	480	
White Female	6,736	4,547	1,137	400	491	60	156	30	102	261	273	330	
Colored Male	3,199	1,819	971	188	490	87	161	45	53	46	136	137	
Colored Female	2,546	1,607	662	166	255	38	160	43	22	20	91	90	
Unknown	157	116	13	4	7	2	—	—	2	7	6	12	
AGE													
Under 5	247	114	59	4	—	—	—	55	15	1	4	24	
5-14	1,472	1,205	103	11	2	—	2	88	37	12	22	70	
15-24	2,828	2,434	231	72	87	15	49	8	28	13	40	80	
25-44	7,336	4,947	1,711	524	700	113	374	—	57	140	167	240	
45-64	5,802	2,780	1,841	470	995	148	228	—	106	268	332	380	
65 and over	2,381	825	665	126	439	73	27	—	66	193	345	240	
Unknown	333	262	21	3	12	5	1	—	3	9	16	21	
ACTIVITY													
Active	—	—	591	25	243	228	19	76	—	—	—	—	
Probably Active	—	—	551	72	382	60	18	19	—	—	—	—	
Inactive	—	—	293	202	47	5	15	24	—	—	—	—	
Probably Inactive	—	—	3,198	911	1,563	61	629	32	—	—	—	—	

TABLE 20

COMPARISON OF TUBERCULOSIS CASE REGISTER STATISTICS, FLORIDA, 1952-1956

Tuberculosis Cases by Activity, Location and Sputum Status	Number of Cases					Percent Distribution				
	1952	1953	1954	1955	1956	1952	1953	1954	1955	1956
TOTAL CASES IN REGISTER	11,172	11,608	11,009	10,821	11,893	100.	100.	100.	100.	100.
Active Pulmonary Tuberculosis	3,976	4,024	3,735	3,631	3,875	35.6	34.7	34.0	33.5	32.6
Questionably Active Tuberculosis	1,253	1,150	1,028	768	688	11.2	9.9	9.3	7.1	5.8
Inactive Pulmonary Tuberculosis	5,846	6,281	6,075	6,209	7,048	52.3	54.1	55.2	57.4	59.2
Primary Active Tuberculosis	—	63	79	107	163	—	0.5	0.7	1.0	1.4
Non-Pulmonary Tuberculosis	97	90	92	106	119	0.9	0.8	0.8	1.0	1.0
ACTIVE PULMONARY TUBERCULOSIS	3,976	4,024	3,735	3,631	3,875	100.	100.	100.	100.	100.
Hospitalized	2,038	2,115	2,150	1,979	2,022	51.3	52.6	57.6	54.5	52.2
At Home	1,938	1,909	1,585	1,652	1,853	48.7	47.4	42.4	45.5	47.8
ACTIVE PULMONARY CASES AT HOME	1,938	1,909	1,585	1,652	1,853	100.	100.	100.	100.	100.
Positive Sputum	987	865	424	328	394	50.9	45.3	26.7	20.0	21.3
Negative Sputum	608	781	633	769	856	31.4	40.9	39.9	46.4	46.2
Undetermined Sputum	343	263	528	555	603	17.7	13.8	33.4	33.6	32.5

TABLE 21
ANALYSIS OF CASES IN THE CENTRAL TUBERCULOSIS
CASE REGISTER

COUNTIES	Total Cases	Pulmonary Tuberculosis				Non-Pulmonary Tuberculosis	ACTIVE CASES				Re-Act. Dis- charged Sanatoria Patients*	
		Active	Questionably Active	Inactive	Primary Active		In Hospital	At Home by Sputum Status			Reg. Disch.	AMA Disch.
								Positive	Negative	Undeter- mined		
Alachua	277	62	18	194	0	3	26	6	9	21	1	1
Baker	15	7	0	8	0	0	4	1	1	0	0	3
Bay	136	39	1	96	0	0	23	6	7	3	0	0
Bradford	54	27	0	27	0	0	13	1	9	4	0	1
Brevard	117	40	1	70	5	1	21	3	9	7	0	3
Broward	451	143	18	278	11	1	68	12	40	23	4	0
Calhoun	35	3	1	31	0	0	2	0	1	0	0	0
Charlotte	22	12	0	9	0	0	5	3	2	0	0	0
Citrus	16	6	0	10	0	0	3	0	3	0	0	0
Clay	33	13	0	19	0	1	5	0	5	3	0	0
Collier	36	14	2	18	1	1	10	0	3	1	0	0
Columbia	66	33	4	29	0	0	20	0	8	5	1	1
Dade	1,941	663	151	1,087	23	17	391	85	141	46	3	17
DeSoto	22	7	1	13	1	0	5	1	1	0	0	0
Dixie	17	6	1	10	0	0	3	1	1	1	0	0
Duval	1,667	605	57	961	13	31	331	50	149	75	11	29
Escambia	548	138	28	374	4	4	61	16	9	52	2	0
Flagler	13	5	0	8	0	0	1	1	1	2	0	0
Franklin	25	9	1	15	0	0	5	0	1	3	0	0
Gadsden	111	27	6	75	2	1	16	0	1	10	0	0
Gilchrist	9	1	0	7	1	0	0	0	0	1	0	1
Glades	7	3	0	4	0	0	2	0	1	0	0	1
Gulf	25	14	1	10	0	0	8	0	2	4	1	1
Hamilton	32	15	1	16	0	0	6	0	2	7	1	1
Hardee	27	10	1	15	1	0	8	0	2	0	0	0
Hendry	19	10	1	8	0	0	3	2	3	2	2	1
Hernando	28	9	2	17	0	0	5	0	1	3	0	0
Highlands	54	20	4	30	0	0	4	1	12	3	1	0
Hillsborough	1,048	326	87	611	10	14	196	39	58	33	10	10
Holmes	34	12	5	15	2	0	3	1	1	7	0	0
Indian River	46	11	3	31	1	0	4	0	2	5	0	1
Jackson	150	40	6	99	1	4	25	2	5	8	0	2
Jefferson	20	5	1	14	0	0	4	0	0	1	0	1
Lafayette	9	2	2	5	0	0	1	1	0	0	0	0
Lake	178	65	8	98	3	4	36	2	9	18	2	0
Lee	95	43	4	44	3	1	25	3	7	8	1	1
Leon	201	45	6	140	7	3	37	0	2	6	1	1
Levy	32	11	2	19	0	0	6	1	3	1	0	0
Liberty	10	4	3	2	0	1	2	0	1	5	0	1
Madison	64	15	0	46	2	1	9	0	1	5	0	0
Manatee	138	41	8	86	3	0	17	3	12	9	2	2
Marion	137	38	3	89	5	2	22	4	5	7	1	1
Martin	61	26	5	27	1	2	13	1	1	11	0	1
Monroe	79	31	7	40	1	0	14	0	7	10	1	4
Nassau	66	19	3	40	1	3	13	0	3	3	2	1
Okaloosa	64	21	7	35	0	1	9	3	2	7	0	1
Okeechobee	14	6	1	7	0	0	3	1	0	2	0	0
Orange	577	177	18	368	11	3	85	22	36	34	3	5
Osceola	60	20	8	29	2	1	5	3	7	5	0	0
Palm Beach	519	139	15	342	20	3	72	11	34	22	3	0
Pasco	77	40	4	30	1	2	19	6	9	6	0	0
Pinellas	771	262	89	409	4	7	117	44	64	37	0	2
Polk	513	155	29	316	13	0	72	13	53	17	0	2
Putnam	111	33	12	65	1	0	17	1	12	3	1	0
St. Johns	94	36	5	53	0	0	20	3	7	6	0	0
St. Lucie	67	20	3	42	2	0	5	3	6	6	0	0
Santa Rosa	53	24	6	22	0	1	10	4	8	2	1	1
Sarasota	122	35	5	80	2	0	17	2	9	7	0	3
Seminole	109	46	1	61	0	1	22	5	14	5	2	1
Sumter	23	6	4	13	0	0	3	2	1	0	0	0
Suwannee	50	17	5	27	1	0	9	0	4	4	1	2
Taylor	40	15	4	20	1	0	7	1	5	2	0	0
Union	15	4	1	10	0	0	1	0	3	0	0	0
Volusia	275	93	12	165	3	2	40	11	24	18	1	1
Wakulla	17	4	1	12	0	0	3	0	0	1	0	0
Walton	36	12	3	21	0	0	8	1	0	3	0	1
Washington	29	9	2	18	0	0	2	2	1	4	0	1
Florida State Prison	86	26	0	58	0	2	0	10	16	0	0	0
STATE	11,893	3,875	688	7,048	163	119	2,022	394	856	603	60	107

*This covers a period of 18 months - from 7-1-55 to 12-31-56.

DIVISION OF VENEREAL DISEASE CONTROL

JOHN H. ACKERMAN, M.D., M.P.H.,
Director

The Venereal Disease Control Program in 1956 consisted of three major programs to achieve the goal of the reduction in incidence and eventual elimination of the five venereal diseases. The first program was the control of the infectious stages of the venereal diseases, particularly syphilis, through epidemiology and education. The second was the reduction of the reservoir of untreated syphilis still existing in the state by means of selective and intensive blood testing. The third, though less spectacular, was the maintenance of records and information of venereal disease cases with an emphasis on complete and accurate reporting by private physicians, clinics, hospitals, and other agencies engaged in the control of the venereal diseases.

The control of infectious syphilis was the primary aim of the program. By treating a syphilitic in the early infectious stages, treatment is not only more effective, but the spread of the disease is eliminated. This is accomplished by interviewing infected persons for sexual contacts and the referral of these contacts to medical care. Trained contact interviewer-investigators were located in key areas where high rates of infectious syphilis occurred. Increased emphasis on more effective interviewing was applied by professional assistance to interviewers, and formal and informal sessions on interviewing techniques and patterns.

The services of a trained interviewer-investigator were offered to any private physician reporting a case of infectious syphilis. If the diagnosis was confirmed the patient was interviewed for sex contacts followed by the necessary investigation. In virtually every case the private physicians granted their permission and cooperated by having their patients interviewed.

Education of selected groups where high rates of infectious venereal disease might exist or be anticipated was effected through the media of movies, talks and literature. The recognition of symptoms and an explanation of where and how to seek medical aid was generally the theme.

The decline in primary and secondary cases of syphilis is demonstrated by Table 22. It should be pointed out, however, that reported cases represent only a part of the actual incidence of infectious syphilis cases as many progress into latency and late complications before detection.

During 1956, reported cases of syphilis showed a very substantial increase over the previous year. A total of 7182 cases of syphilis was reported in 1956, against 5541 in 1955. This increase may be

largely attributed to increased casefinding activities by means of selective blood testing projects. Since serological screening rarely uncovers cases of infectious syphilis the bulk of the increase represents late and late latent cases.

During the year selective blood testing projects were conducted in Brevard, Hillsborough, Pinellas, Palm Beach, Broward, St. Lucie, Sarasota Manatee, Lee, Santa Rosa, and Okaloosa Counties. Of the 46,218 specimens tested 3433 were positive reactors or 7.86 per cent.

Beginning in July 1956, a follow-up team consisting of a diagnosing physician and two field investigators was added to the blood testing project. Prior to this time many reactors detected during the screening phase of the program were never brought to treatment and/or examination due to a dearth of personnel in the local health units who had sufficient time to devote to the blood testing project follow-up. The follow-up team's primary responsibility was to expedite the examination and treatment phase of the project and their addition to the project gleaned many additional cases by prompt and thorough investigation.

A second blood testing team consisting of two blood letters and a nurse was organized in November. They began operation in West Florida.

Selective blood testing included blood tests for elevated blood sugars being drawn on individuals thirty years old and over in most counties, in an attempt to locate and bring to medical care previously unknown cases of diabetes. A total of 27,780 blood sugar tests were drawn with a total of 945 showing an elevated result on initial test. This phase of the survey was done in co-operation with the Division of Diabetes Control.

Gonorrhea showed a decrease from 1955, which is reflected in Table 22. This decrease is not as marked as in the other venereal diseases. This is probably due to the fact that the epidemiological methods applied so successfully to syphilis are being applied to only a very small part of the total cases of gonorrhea which occur in the state.

The incidence of minor venereal diseases: chancroid, granuloma inguinale, and lymphogranuloma venereum remained about the same as they have for the past three years. It is felt that the incidence of these diseases is reaching a control level and that they no longer constitute a serious public health threat.

Tables 3, 4, and 5 represent the trend in the venereal disease morbidity during the past decade, within the state.

Renewed emphasis was placed on cooperation with private physicians, hospitals, and other institutions in encouraging the reporting of venereal disease cases, particularly syphilis. The increasing

importance of this phase of the program is manifested by the figures of the Venereal Disease Central Registry, indicating private physicians reported 56 per cent of all the syphilis cases reported in 1956. The Florida program for achieving reporting by private physicians served as a model for a number of other states initiating similar programs during the past year.

Several personnel changes have occurred during the year. Dr. Michael J. Takos returned from Harvard University, where he received his MPH degree, to the Dade County Health Department as Director of the Venereal Disease Clinic. Dr. H. Donald Hill assigned as Director of the Dade County VD Clinic during the absence of Dr. Takos, assumed new duties as director of the follow-up selective survey team in July 1956. Dr. James A. Donaldson, Director of the Polk County VD Clinics, was transferred in July to South Carolina, but was not replaced.

The USPHS transferred several interviewer-investigators from Florida to other states. They were replaced by other well trained interviewer-investigators. Mr. J. M. McDiarmid was transferred and was replaced by Mr. Charles D. Bird. Mr. A. J. Sweeney who had been the Public Health Service Program Representative in Florida for the past ten years was transferred in December.

The First International VD Symposium was held in Washington, D. C., May 28-June 1, and was attended by a number of public health workers in Florida. There were fifty-four countries represented and the exchange of ideas throughout the world on approaches to the various aspects of our common venereal disease problems was very beneficial to all in attendance.

FIG. 3
CASE INCIDENCE OF GONORRHEA
(PER 100,000 POPULATION)
FLORIDA 1948 - 1956

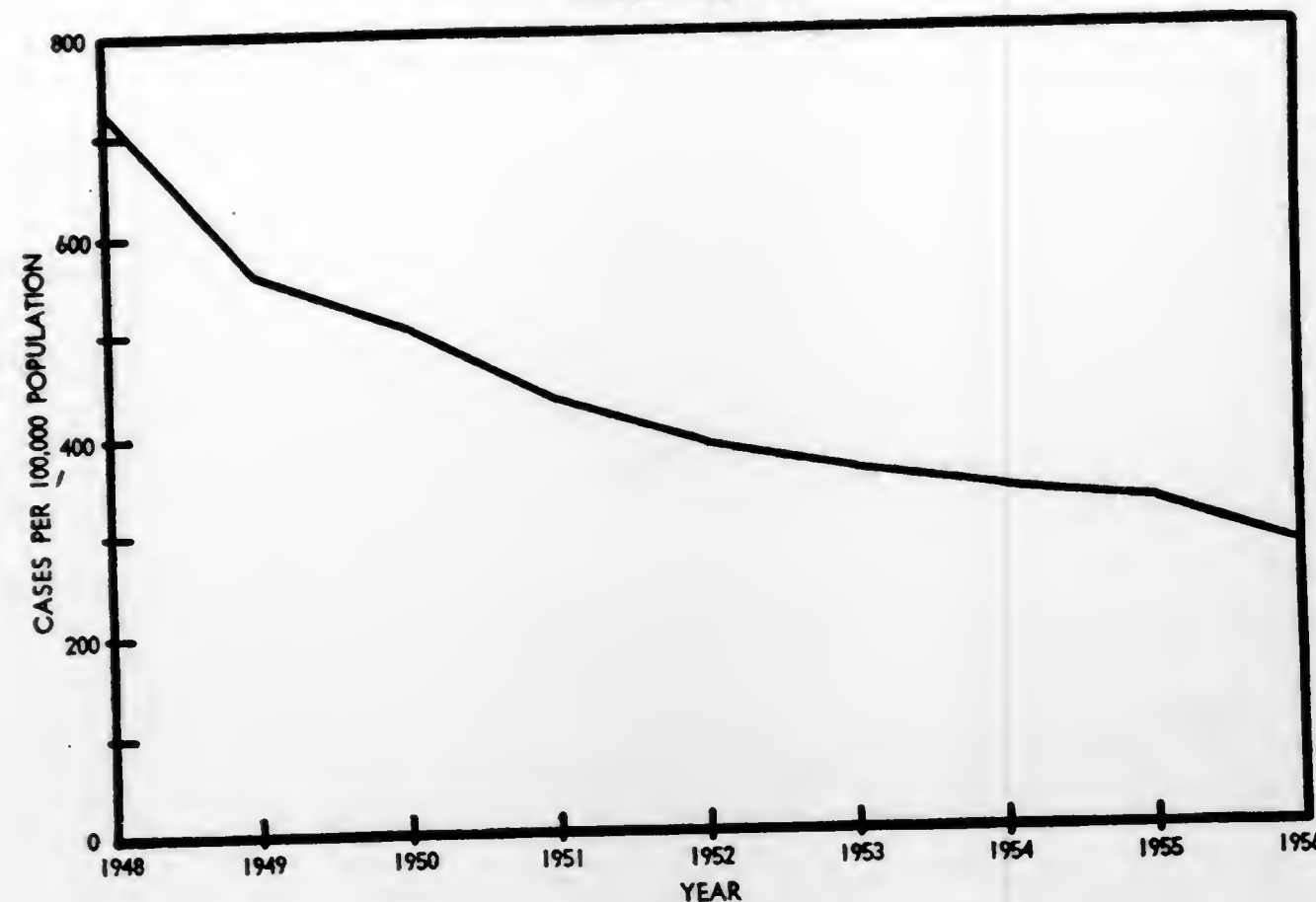


FIG. 4
CASE INCIDENCE OF SYPHILIS AND STAGE OF INFECTION
(PER 100,000 POPULATION)
FLORIDA 1948 - 1956

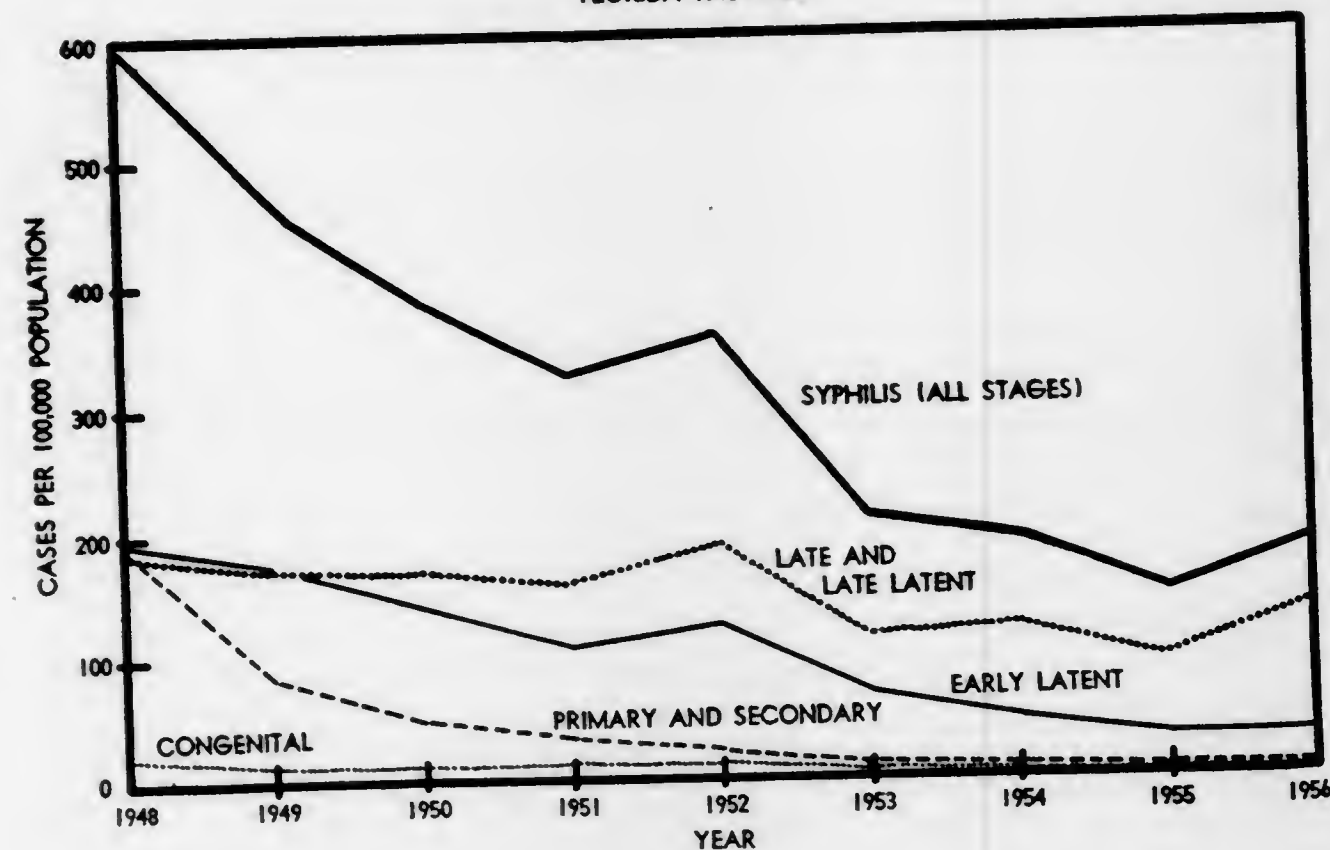


FIG. 5
CASE INCIDENCE OF CONGENITAL SYPHILIS
(PER 100,000 POPULATION)
FLORIDA 1948 - 1956

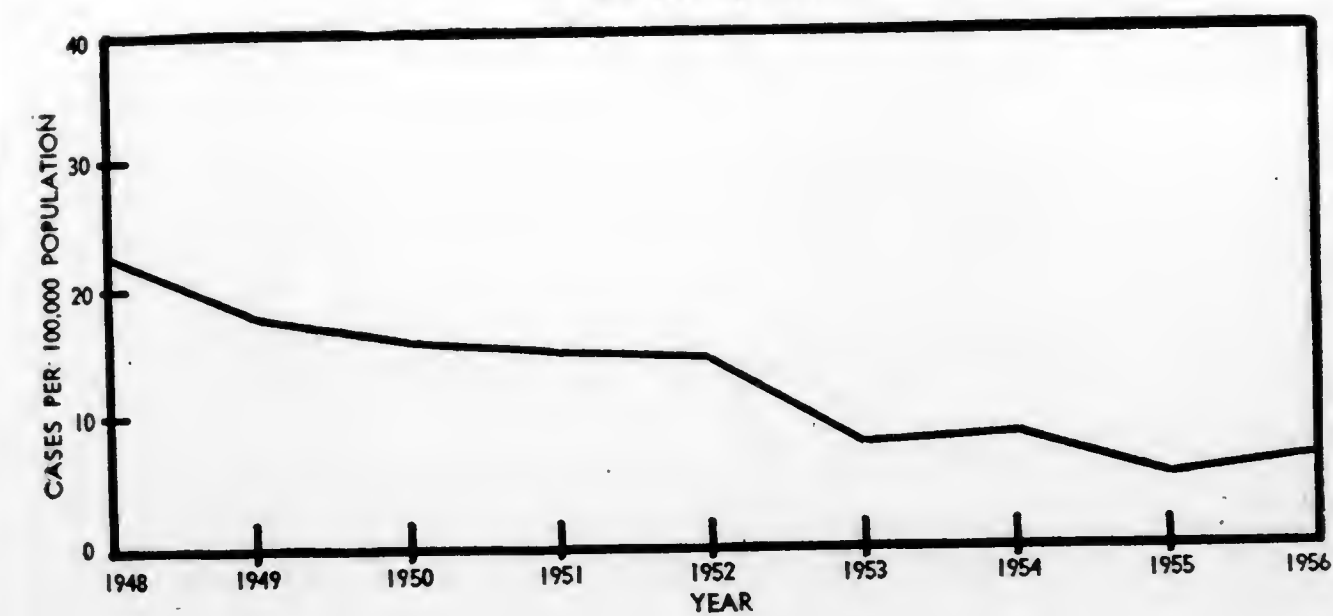


TABLE 22
REPORTED CASES OF VENEREAL DISEASE, FLORIDA
1948 - 1956

YEAR	SYPHILIS					GONORRHEA	CHANCROID	GRANULOMA INGUINALE	LYMPHOPATHIA VENEREA
	Total	Primary and Secondary	Early Latent	Late and Late Latent	Congenital				
NUMBER OF CASES									
1956	7,182	205	1,372	5,339	266	10,991	273	73	55
1955	5,541	394	1,329	3,816	202	12,146	388	69	51
1954	6,894	448	1,786	4,366	294	11,841	344	71	55
1953	6,722	585	2,245	3,648	244	11,459	328	109	98
1952	10,824	785	3,870	5,730	439	11,809	462	233	120
1951	9,445	1,111	3,188	4,711	435	12,709	317	417	40
1950	10,738	1,509	3,990	4,797	442	14,185	248	446	34
1949	12,363	2,370	4,804	4,706	483	15,388	343	827	127
1948	15,395*	4,837	5,149	4,775	614	18,820	388	773	197
RATE PER 100,000 POPULATION									
1956	185.3	5.3	35.4	137.8	6.9	283.6	7.0	1.9	1.4
1955	152.1	10.8	36.5	99.2	5.5	333.4	10.6	1.9	1.4
1954	198.0	12.9	51.3	125.4	8.4	340.1	9.9	2.0	1.6
1953	216.1	18.8	72.2	117.3	7.8	368.3	10.5	3.5	3.1
1952	360.0	26.1	128.7	190.6	14.6	392.8	15.4	7.8	4.0
1951	325.5	38.3	109.9	162.3	15.0	438.0	10.9	14.4	1.4
1950	387.5	54.5	144.0	173.1	15.9	511.9	8.9	16.1	1.2
1949	459.2	88.0	178.4	174.8	17.9	571.5	12.7	30.7	4.7
1948	594.9	186.9	199.0	184.5	23.7	727.3	15.0	29.9	7.6

*Includes 20 cases with stage not stated.

TABLE 23

TOTAL NUMBER OF SYPHILIS CASES REPORTED BY STAGE OF INFECTION, PREGNANCY STATUS, RACE AND SEX, SOURCE OF REPORT, BY COUNTIES, FLORIDA, 1956.

COUNTY	STAGE OF INFECTION							RACE AND SEX				SOURCE OF REPORT			
	Total	Primary	Secondary	Early Latent	Late Latent	Congenital	Pregnancy	WHITE		COLORED		Unknown	Clinic	Private Physician	Other
								Male	Female	Male	Female				
STATE	7182	112	93	1372	5339	268	234	1033	894	2406	2566	283	3126	4050	8
Alachua	81			20	56	5	10	13	10	23	33	2	51	30	
Baker	5			1	4				2	1	2		1	5	
Bay	23	1		2	18	2	1	1	4	11	6	1	18	5	
Bradford	7			1	6			1	2	2	2		21	46	
Brevard	67	1	1	11	50	4		9	4	24	29	1	694	294	
Broward	988	9	1	127	816	35	15	66	72	376	380	94	1	1	
Calhoun	2				2			1	1	2	1		1	4	
Charlotte	5			1	4			1	1	4	4	1	1	10	
Citrus	11			1	11			1	3	3	3	2	3	8	1
Clay	12		1	1	10		1	1	3	4	9		6	20	
Collier	26			9	15	2	2	6	7	4	16	2	6	36	
Columbia	42	1		2	39		1	4	5	15	18		285	1145	
Dade	1430	19	21	361	986	43	50	350	273	307	461	39	14	34	
DeSoto	48			5	43		1	19	13	8	7	1	1	1	
Dixie	1				1			1	104	357	380	41	310	693	
Duval	1003	35	22	271	654	21	15	121	9	16	26	44	1	62	34
Escambia	96		5	17	61	13	19	9	16	2	2			4	
Flagler	4				4		1	1	1	1	3		4	3	
Franklin	7	1		1	5			1	2	1	3		1	1	
Gadsden	17			6	9	2	1	2		10	4	1	7	1	
Gilchrist	1				1					1	1		1	1	
Hamilton	16			5	10	1	2		2	6	8		9	7	
Hardee	2		1		1					1	1		1	1	
Hendry	7	1			6				3	4	2		2	5	
Hernando	9	1	1	2	4	1	1	2	1	1	5		2	7	
Highlands	31	1		8	20	2	3	2	4	10	15		4	27	
Hillsborough	360	3	8	62	277	10	9	69	51	127	108	5	240	118	1
Holmes	2	1		1	1					2	2		1	1	
Indian River	15	1		5	9		2	2	2	3	8		4	11	
Jackson	12			3	7	2		1	3	6	2		4	8	
Jefferson	10			1	8	1		2	3	4	3	1	6	4	
Lafayette	1				1					1	1		1	1	
Lake	47	1		9	36	1		6	8	22	11		17	30	
Lee	110		2	18	89	1	1	4	4	65	36	1	95	15	
Leon	79	2	3	6	65	3	2	2	4	37	35	1	64	15	
Levy	10			1	8	1		1		5	4		4	6	
Liberty	1				1					1	1		1	1	
Madison	11			4	7			1	1	3	6		5	6	
Manatee	191		1	21	158	11	4	22	16	72	80	1	150	41	
Marion	117		1	18	90	8	4	8	8	32	60	9	31	86	
Martin	18	1	1	6	9	1		2		8	8		6	12	
Monroe	41	1		12	28		1	9	12	10	9	1	17	24	
Nassau	5	1	1		3			2		2			1	3	
Okaloosa	9	2		3	4		2		1	2	5	1	3	4	
Okeechobee	3			1	2					1	2			3	
Orange	246	2	5	82	148	9	7	48	40	59	89	10	66	179	1
Osceola	16			3	13		1	3	4	3	6		4	12	
Palm Beach	365	12	2	81	263	7	8	38	41	162	114	10	201	164	
Pasco	28			2	25	1	1	6	3	8	11		2	26	
Pinellas	345	4	2	36	287	16	12	86	57	90	88	24	96	249	
Polk	340	1	6	39	277	17	12	31	44	137	119	9	153	187	
Putnam	30	1		1	26	2	8	1	4	6	18	1	1	29	
St. Johns	38			11	26	1	2	4	2	16	15	1	3	35	
St. Lucie	275	5	4	15	238	13	6	9	11	134	116	5	198	77	
Santa Rosa	23			5	16	2		1	3	10	9		9	23	
Sarasota	161			4	149	8	1	17	13	67	59	5	132	29	
Seminole	106	1	2	30	70	3	9	11	8	47	40		42	64	
Sumter	11			4	7			1	3	2	5		6	5	
Suwannee	20	1		5	14			3	3	6	8		4	16	
Taylor	13		2	1	9	1	1	3	1	3	6		3	9	
Union	14			1	12	1		1		11	1	1	13	1	
Volusia	141	1	1	29	99	11	16	21	18	39	55	8	28	113	
Wakulla	2				2			1		1			1	1	
Walton	10			2	6	2	1	1		4	5		8	2	
Washington	4				3			1	1	1	2		7	4	
State Hospital	7				7			2	1	1	1		2		
Federal Prison	4				4					1	1		1		

No cases reported in Glade county or Gulf County.

VETERINARY PUBLIC HEALTH

JAMES E. SCATTERDAY, D.V.M., M.P.H.

During the past year the Division of Veterinary Public Health has concerned itself with the prevention and control of the following animal diseases, which are communicable to man.

Anthrax: Again this year anthrax was not diagnosed; however, numerous specimens were submitted to the Veterinary Bacteriology Laboratory for examination. A low water table, as well as exceptionally little rainfall, is probably responsible for this. Also many one-time infected pastures are now housing projects.

Brucellosis: The incidence of brucellosis has been reduced quite successfully over a period of a few years. This can be attributed to a more concentrated effort by the agencies involved, e.g., Florida Livestock Board, Animal Diseases Eradication Branch, Florida State Board of Health, and Governor LeRoy Collins' Committee on Brucellosis Eradication. Stricter enforcement of existing regulations, as well as cooperation between these agencies, has added greatly to the success of this program. There were 229,437 cattle tested in 1956, with 4980 reactors found and disposed of. 84,337 calves were vaccinated with Strain 19 vaccine. This year, the same as last, only twelve cases of human brucellosis (undulant fever) were reported for the state.

The Florida livestock Board passed regulations, restricting animals other than calfhood vaccinates, or cattle originating in certified brucellosis-free herds, from entering Florida after January 1, 1958.

Area work, or blood testing by county, was started in 1956. Escambia County has been certified as modified accredited, meaning that all cattle have been tested with less than one-half of one per cent infection disclosed. Testing has also been completed in Walton County, and, at the present time, is underway in two more West Florida counties. Plans are to continue testing across the northern tier counties, working east and southward until Florida is brucellosis-free.

Brucellosis in humans can only be controlled by eliminating the animal reservoir.

Bovine Tuberculosis: 2421 herds of cattle were tested, consisting of 130,560 cattle. Of this total only five premises were found infected, with 34 individual reactors. This disease has been on the decrease steadily for the past few years, and with the continued enforcement of state, county and municipal regulations, it can be eradicated.

Rabies, ever present, reached a total of 62 cases this year. Seven species including dogs, cats, cattle, horses, foxes, raccoons and bats

were found to be infected. Cases were quite widespread over the state, involving twenty-four of the sixty-seven counties. Table 24 gives the breakdown of these cases by species, county and month of occurrence.

It is interesting to note from the following chart, which shows known exposure to rabid animals, that the cat exposed more people than any other species. With a total of only thirty-two human exposures, the State Board of Health dispensed through the County Health units, 441 human antirabies treatments.

	Dog	Fox	Raccoon	Cat	Horse	Bat	TOTAL
Known Human Exposure	7	5	4	11	1	4	32
Animal Exposure	1	4	2	2			9
Totals	8	9	6	13	1	4	41

Equine Encephalomyelitis: The Eastern strain was clinically diagnosed in 109 horses or mules. No confirmed human cases were diagnosed.

Leptospirosis: or Weils Disease in the human, is quite prevalent in cattle, primarily in dairy herds. It has caused considerable economic loss due to suppressed milk production and abortions. Leptospirosis in dogs has a high mortality rate and is widespread due to their close association with the human, especially when ill. It has been of considerable concern in animals throughout the years, but no human cases of *L. canicola* or *L. icterohemorrhagica* were diagnosed. In 1956 leptospirosis was diagnosed in 89 herds of cattle, 458 dogs, and 67 other species.

Ringworm, a fungus infection of animals and man, was clinically diagnosed in 174 dogs, 59 cats, and 32 other animal species. It is not at all unusual to find an entire family with mycotic lesions due to a pet which is infected with ringworm.

The Animal Morbidity Reporting program completed its third year in Florida in 1956. While some of the first year's interest has waned, 65 per cent of the 256 practicing veterinarians are participating. Table 25 indicates the total number of diseases reported by the veterinarians, by county and disease.

All animal diseases of public health importance are investigated. These diseases may be parasitic, bacterial, viral or mycotic.

Biologist's Report—Wildlife rabies continues to be a serious problem, with epidemic outbreaks during the past year in Gadsden, Leon and Jefferson Counties and isolated cases throughout the state. We have come to realize that a rabies outbreak is likely to follow whenever foxes or raccoons increase to cyclic abundance.

With endemic conditions in wildlife populations it is now obvious that dog control alone will not wipe out rabies in the state.

Present efforts are aimed at preventing dog epidemics by extensive immunization, particularly in areas with recurring wildlife rabies. Techniques for reducing the numbers of overpopulated species, so that epidemics will die out, are being improved with use. Work is progressing satisfactorily toward a knowledge of fox and raccoon population dynamics which will permit reasonable accuracy in predicting conditions favorable to epidemic outbreaks in these species. Perhaps in the foreseeable future these techniques will permit safe reductions in overpopulated species to be made before dangerous conditions develop.

Bat Rabies—The study of rabies in bats was continued with special emphasis on those aspects of the problem which have showed promise during the earlier phases of the study. After finding rabies in flightless young, with apparently rabies-negative mothers, particular attention was paid to the general problem of how and when in life bats acquire the disease. More intensive work was begun in a large, rabies-infected colony to study seasonal and age phenomena affecting the infection rate. Particular attention was paid to presence of immune antibodies and the age at which they appear in the individual. Problems of technique and methodology which were discouraging at the first have been gradually overcome.

Further progress was made in our effort to fill some of the gaps in our knowledge of basic bat biology in Florida. Generalized collecting was abandoned but efforts were intensified in those areas where few bats have been found in earlier work.

TABLE 24

**NUMBER OF LABORATORY CONFIRMED CASES OF ANIMAL RABIES
BY SPECIES, COUNTY AND MONTH — 1956**

COUNTY and MONTH	Dog	Cat	Cattle	Horse	Fox	Raccoon	Bat	TOTALS
TOTAL	10	10	4	1	14	13	10	62
Alachua	--	--	--	--	2	1	1	3
Bay	2	1	--	--	--	--	--	4
Broward	--	1	--	--	--	--	--	1
Calhoun	1	--	--	--	--	1	--	1
Bade.	--	--	--	--	--	--	1	1
Dixie	--	--	--	--	--	1	1	3
Duval	1	2	--	--	2	--	--	4
Escambia	--	--	--	--	5	--	--	12
Gadsden	3	--	4	--	--	--	1	1
Hamilton	--	--	--	--	--	--	--	2
Hillsborough	--	1	--	1	--	--	--	1
Jackson	1	--	--	--	2	--	--	2
Jefferson	--	--	--	--	--	2	--	2
Lee	--	--	--	--	1	--	--	1
Leon	--	--	--	--	1	--	--	2
Marion	--	1	--	--	--	--	2	2
Orange	--	--	--	--	--	6*	--	7
Palm Beach	1	--	--	--	--	--	1	2
Polk	--	1	--	--	--	1	--	2
St. Johns	--	1	--	--	--	--	--	1
Sarasota	--	--	--	--	--	--	3	3
Sumter	--	--	--	--	1	--	--	3
Suwannee	1	1	--	--	--	1	--	1
Volusia	--	--	--	--	--	--	--	--
MONTH	10	10	4	1	14	13	10	62
January	1	2	--	--	1	1	--	5
February	1	1	--	--	1	7	--	10
March	2	--	--	--	1	1	1	5
April	--	--	2	--	--	--	--	2
May	--	1	--	--	1	--	2	4
June	1	--	1	--	--	2	**6	10
July	2	1	--	1	2	--	--	6
August	--	1	--	--	1	1	1	4
September	1	2	--	--	--	--	--	3
October	--	1	1	--	1	--	--	3
November	2	1	--	--	5	1	--	9
December	--	--	--	--	--	--	--	4

- This number of positive rabies in Palm Beach was due to a survey conducted in that area. No clinical rabies existed in this county prior to this survey.
- These bats in June are also due to a survey. In other animals the pattern still shows the highest rabies rate during the winter months December, January, February and March.

TABLE 25

CASES OF ANIMAL DISEASES REPORTED BY VETERINARIANS, FLORIDA 1956

COUNTIES	Anaplasmosis		Anthrax		Blackleg	Brucellosis Swine	Encephalo-equine	Hog Cholera	Infections Anemia, Equine	John's Dis.	Lepto-spirosis			Malig. Edema	Newcastle Dis.	Psittacosis	Rabies				Eryselas Swine	Vesicular Exanthema	Ringworm		
	Cattle	Other	Cattle	Other							Cattle	Dogs	Other				Dogs	Foxes	Cattle	Other			Dog	Cat	Other
TOTAL	317	0	0	233	39	109	439	42	2	89	458	67	3	0	0	7	9	2	10	181	0	174	59	32	
Alachua	13			11		2	40				1	5							21			2			
Alford					1						1	11							1			16	6		
Alford	4			3		2																4	2		
Alford	1			3		1	2	7		20	32	4							1			22	8	6	
Alford						1	9	4			2					1									
Alford												1													
Alford				10							4														
Alford				6		2	7				1								1			3	12	2	
Alford	1					5		19			120	20										41		10	
Alford				2			1																		
Alford																									
Alford	20			31	3	25	1			31	98	12	1			1	4		1			37	4		
Alford				4		2	3			3	3														
Alford							1	23				6				1	2	2		19					
Alford				12		7																			
Alford	15			3								1													
Alford						1										1									
Alford				3		5				11			7												
Alford	4			1			2	2			1														
Alford	26								1	7		2	2				2					16	8	2	
Alford	2			1		2																			
Alford	10			12	3	3	49																		
Alford																									
Alford	2			20		11	50			1	1	2					2			46					
Alford	2			4		2	3			2	8	1							1			18	7		
Alford	6				2							3													
Alford				9		1	21	7												10					
Alford					15	1																			
Alford	5			4	13	1	32													28		3			
Alford											3														
Alford	4			19	3		4	2			9														
Alford	46			17		1		5			11											1	2		
Alford																									
Alford					1						8	1													
Alford						34																			
Alford	21					2	55	3		1	69								3					4	
Alford	8					5		1			1											2			
Alford	69			21		1	2	4		11	2	5							2						
Alford	2										1											7	1		
Alford						4					9														
Alford	3			6		3	37				21	1	1							17		2	9	4	
Alford						1																			
Alford	1						13																		
Alford	5													1											
Alford						1																			
Alford	1					1																			
Alford	4						15				22	2													
Alford																									
Alford				4	1	4													1		36				
Alford																									
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Alford	42								1		6	4												4	
Alford										1															
Alford				21		1	34																		
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MILK CONTROL SECTION

SAMUEL O. NOLES, B.S.A.,
LEWIS W. WILLIS, B.S., M.P.H.

One of the weaker links of clean milk production has almost disappeared in Florida: the use of tinned metal cans for transporting milk from dairy to plant. The conversion to stainless steel cold-wall tanks and bulk hauling has also completely eliminated the lack of sufficient refrigeration of the milk at dairies. These facts, coupled with better equipment and methods of operation in processing plants, have resulted in (1) a better, far longer-keeping quality product, (2) superior flavor, and (3) a safety of milk products that has seldom, if ever, been equaled anywhere.

These desirable results have been accomplished through coordinated efforts of personnel in regulatory organizations and industry. There has been a notable increase on the part of industry to secure only high quality milk. The staff in this section has been able to contribute to the total picture of milk sanitation in several ways. The collection and recording of information in the Central Milk Registry has furnished invaluable information concerning both strong and weak points in control programs. From this information has come the indications as to what should be done to strengthen and coordinate efforts of personnel in quality control work.

There are still many problems to be met. Population growth in Florida is increasing faster than milk production. Many dairymen are being forced to sell their land for housing subdivisions. This is resulting in a "decentralization" of dairies. Production areas are becoming further removed from centers of population and from processing plants. Milk consumption has increased faster than milk production. A considerable amount of time and effort has been devoted to developing new areas of milk production and supply in order to alleviate shortages within the state.

One area of responsibility for milk sanitation personnel in the State Board of Health has been increased. This is in respect to milk being supplied to military forces. Some of the milk for military forces is shipped in raw to local plants from sources outside the state. A close check is kept on this milk to prevent receiving inferior quality products.

During two months of the year the Public Health Service and State Board of Health held five three-day courses on proper installation, operation and testing of milk plant equipment, which included all new types. These courses were attended by over one hundred sanitarians and milk plant operators from all sections of the state.

Much effort was directed toward obtaining uniform enforcement of milk sanitation requirements. In addition to working with local

sanitarians and Department of Agriculture personnel on quality control programs, meetings were held in which all the sanitarians and quality control field men for a particular milk shed had round-table discussions of mutual problems and worked out definite plans for coordination of all activities to derive the greatest benefit from efforts expended.

The two milk consultants are quite appreciative of the very excellent cooperation extended to them by health officers, sanitarians, dairy supervisors of the Department of Agriculture and members of the industry. Only through such cooperation could so much be accomplished in one year, but the services of another milk consultant could very profitably be utilized.

Below is a brief indication of the activities of milk consultants during 1956.

Visits to counties	71
Dairy Farms Inspected	1,007
Processing Plants Inspected	71
Dairy Farm Plans Reviewed	8
Milk Plant Plans Reviewed	7
Conventions attended (Regulatory & Industry)	10
Public Health Service Mobile Unit Training Courses	5
Sanitarian-Trainee Milk Sanitation Courses	3

BUREAU OF LABORATORIES

ALBERT V. HARDY, M.D., Dr. P.H.,
Director

ORGANIZATION AND PERSONNEL

It was reported one year ago that "The major organizational change which was planned and effected during the year 1955 was the establishment of a cooperative program in the laboratory field with the State Tuberculosis Board and its four hospitals." It was noted that the plan became effective on November 1, 1955. We report now on the first full year of operation of this program.

The development of physical facilities was an early and major concern. A new laboratory was developed in the W. T. Edwards Hospital in Tallahassee in space originally designed for a cafeteria with a central serving area and two dining rooms. Using materials which were available, the highly competent maintenance staff of the hospital constructed and finished a well designed, convenient, and modern laboratory. In March, the Tallahassee Laboratory moved from the poorest to the best quarters available to the Regional Laboratories. A little later the clinical laboratory moved and became one section of a consolidated laboratory.

Elsewhere the space in use was improved. In Lantana, a second walk-in incubator had to be provided to meet the needs of the rapidly expanding bacteriology. Here, also, the clinical laboratory became a division of a consolidated laboratory. In Orlando, a TB preparation room was developed, suitable cabinets were installed and an additional walk-in incubator was constructed. Even the new laboratory in Tampa required some modifications in the interest of efficiency and to provide for a safe handling of large volumes of infectious materials.

As might be expected of new organizations, it required time to attain smooth operation. During the later months of the year, all of the TB laboratories except Tampa had a full staff operating smoothly and effectively. In Tampa, the staff was more than adequate to provide the diagnostic services required by the hospital but there has been modest progress only in beginning to develop a research staff program.

The planning of the space and facilities for the Miami Regional Laboratory proceeded slowly during the year. There were repeated contacts with the architects considering space allocation, room arrangement, laboratory installations and utilities.

The Regional Laboratory in Orlando was a second priority building project. On July 1, state funds for these were released. In sub-

sequent months the federal matching funds were authorized and it is hoped that construction plans will develop rapidly in 1957.

There was a minor but important arrangement for supplementary facilities in Miami. Bacteriological examinations for tuberculosis cannot be handled safely in the open laboratory in the court house building. Currently, all specimens for this examination are submitted to Lantana. This is acknowledged to be unsatisfactory. Through the joint interest and concern of Dr. Warren Hoffert and Dr. Eugene Flipse, suitable space in the Chest Unit of Jackson Memorial Hospital was made available until the new laboratory is ready for occupancy. This will be in service as soon as the needed laboratory furniture and the required utilities are installed.

The laboratory staff was strengthened during the year by the return in September of Dr. Warren Hoffert on the completion of his Ph.D. studies at the University of Pittsburgh School of Public Health. He assumed charge of the Miami laboratory. The staff suffered one grievous loss. Reynolds Davis, age 32, died suddenly in December. He had served as chief of the Tampa TB Laboratories from the beginning of the cooperative program. The hospital employees monthly publication wrote as follows: "with deep sorrow we note the passing of Mr. Reynolds Davis, whom we all knew as a friend . . . It is as a cordial and always cheerful gentleman that we shall best remember him. . . . During the war, he served in the Navy in the South Pacific. After graduating from Emory University, he joined the laboratory staff of the State Board of Health in Jacksonville, later being assigned to the Tampa Regional Laboratory. Few men were ever called away from a career so bright as seemed in store for him; and certainly few labored so diligently for the welfare of others as he did."

With the beginning of the fall semester, Arthur Lewis, D.V.M. began a one year period of study at the University of Minnesota School of Public Health under USPHS traineeship granted by the University. His place is being filled temporarily by Dr. Wellington Moore, D.V.M. on assignment from the Veterinary Public Health Division of the Public Health Service.

DIAGNOSTIC SERVICES

The same types of diagnostic services were made available in 1956 as in preceding years. The volume of work continued its gradual increase. There were 2,653,191 examinations on 1,234,881 specimens in 1956, the largest numbers ever attained. This is an increase of 47,694 specimens and 50,491 tests over the preceding year. The diagnostic services grew even more than indicated by these figures. The laboratory work on special studies was curtailed in 1956, this tending to reduce the total specimens tested and examinations performed. Considering only the general public health diagnostic

laboratory services, in the year under review 64,972 more specimens were received and 175,899 more examinations were performed than in the preceding year. These increases were chiefly in syphilis serology, tuberculosis, mycology, the quality control of water and in case finding examinations for diabetes. Three regional laboratories accounted for most of the recorded increases, Tampa, West Palm Beach, and Miami. There was little change in the volume of work in other regional laboratories. Due to the decrease in special studies, a small decrease in the number of tests performed was recorded for the Jacksonville laboratory. Table 26 shows the total tests by laboratory for 10 years and Table 27 the number and types of tests by laboratory in 1956.

The results of examinations are indicated in Table 28. During 1956, the specimens submitted for a serologic test for syphilis reached the high total of 718,961, an increase of 46,511 over 1955. For the period under review, 46,218 specimens were collected and submitted in the first full year of case finding surveys. Thus, the increasing laboratory activity in syphilis serology in 1956 was related largely to vigorous case finding programs. The proportion of all specimens found reactive continued the downward trend. This dropped progressively from 16.6 per cent in 1950 to 8.3 per cent in 1953, 8.0 in 1945, 7.0 in 1955 and 6.4 per cent in 1956. Of the specimens collected in case finding surveys, 7.9 per cent were reactive, thus these increased rather than decreased the percentage for the total.

A total of 190 specimens were submitted for TPI (*Treponema pallidum* immobilization) tests as compared with 115 in 1955 and 17 in 1954. Of these which could be examined, 55 per cent were reactive, 3.7 per cent weakly reactive, 40.1 per cent nonreactive and 1.2 per cent inconclusive. The percentages found reactive were a little higher than in the preceding year. It seems highly significant that in these cases in which the standard serological tests were positive but in which the physician presumably considered the infection improbable, that a more highly specific laboratory test indicated the probability of infection in more than one half. Contamination in specimens submitted continued to be troublesome; one in each ten submitted for TPI could not be tested because of bacterial contamination.

The number of specimens submitted for "febrile agglutination tests" declined slightly and those with reactions which might have significance as an aid in the diagnosis of typhoid and typhus fevers dropped substantially. These agglutination tests have value only in the diagnosis of infections which now are relatively rare. The present situation in these tests appears comparable to that following the rapid decline in the incidence of malaria. It became necessary to discourage the routine submission of blood smears for malaria parasites. Similarly there appears to be a current need to encourage

a more critical selection of cases in which these agglutination and related tests are truly indicated.

Fewer specimens to be examined for evidence of diphtheria and related infections were submitted during the year but the number of positive observations increased slightly. Specimens positive for *C. diphtheria* numbered 112 in 1954, 141 in 1955 and 150 in 1956. During the year there was a marked increase in the finding of presumably significant streptococci. These positive observations increased from 170 in 1955 to 416 in 1956. This represents predominantly the result of more exacting laboratory procedures for the identification of these infections. In diphtheria also, it appears that the laboratory tests have been increased in sensitivity. We have been impressed with the number of individuals found positive for virulence *C. diphtheriae* who had either mild symptoms or none at all.

The total number of examinations and the number of positives observed for *M. tuberculosis* both increased substantially in 1956 as compared with 1955. The percentage of specimens found positive has continued to decline as is shown in Table 29. For the years up to and including 1952 (prior to the organization of the West Palm Beach Regional Laboratory in its present location in the TB Hospital) the percentages indicate findings for all public health laboratories. From 1953 the data exclude this one regional laboratory. These data are the findings on specimens collected and submitted by private practitioners and public health clinics. During the period 1950 through 1956, bacteriological technics were relatively constant and the specimens were submitted from the same general sources. However, in this period of eight years, there has been a progressive decline in percentage positive; at present only about half as many are found positive as compared with eight years earlier. The lack of continuing decline in 1956 as compared with 1955 may be the effect of minor improvements in culture technics. However, during this time an increasing number of patients were discharged from the TB Hospitals under continuing therapy and these were being examined. The trend in future years will be observed with interest to determine whether there is any change in the gradual downward trend in positive findings.

Specimens submitted for the identification of Gram negative diplococci continued at a high level. During the year, 58,662 smears and 22,629 specimens for culture for GC were received. As compared with the preceding two years, there was a very slight decline in the proportion found positive, but the observed reduction was not marked and its significance remains uncertain.

The number of fecal specimens examined for enteric pathogens increased slightly over the preceding year. Through modified and improved technics, as many pathogens were isolated in 1956 through the performance of 130,467 examinations as were found as a result

of 141,345 tests in 1955. During the year the bacteriophage typing of *S. typhosa* was adopted as a routine test through the cooperation of the CDC laboratories. These findings should prove of substantial value in epidemiological investigations.

Blood cultures during the year under review, as in preceding ones, failed to yield many significant observations. Insofar as is practicable this work is being restricted. During 1956, specimens processed for this test were reduced by more than one third.

In the miscellaneous examinations, the notable change is the marked increase in the number of specimens for mycological examination. In 1955, there were 433 specimens submitted for this examination as compared with 1036 in 1956. Other than this the nature of the work performed was similar to that of preceding years.

In the field of sanitary bacteriology, the number of samples of dairy products tested did not change significantly. However, there was a substantial increase in the number of samples of water, shellfish and of utensil swabs. Specimens of saliva for lactobacillus count are examined also in the Sanitary Bacteriology Laboratory. This test was offered as a special project on a trial basis in 1955; during that year 153 samples were submitted. During the current year, this increased to 954. It appears probable that this examination will be widely adopted in dental practice in the investigation of cases with excessive dental caries. This bureau in cooperation with the Bureau of Dental Health, through this test is providing a new and useful service to the dental profession.

As in preceding years, the examinations for enteric parasites represent a heavy volume of work. In 1956 a total of 134,512 fecal specimens were received for this test as compared with 136,072 in 1955. Table 30 summarizes the trend in findings for two parasitic diseases in recent years. In north Florida, in the areas served by Jacksonville, Tallahassee and Pensacola laboratories, the proportion of specimens positive for hookworm declined by about one-half in eight years. In Tampa there was a relatively slight decline. In Miami and in Orlando the percentage of positives is lower with less evidence of decrease particularly in Miami. The observations on ascariasis differs significantly. The high proportion of positives are in the Jacksonville, Miami and Tampa laboratories and in these there is no evidence of any diminution in the proportion of positives. Indeed the trend has been up rather than down. In the areas served by the Orlando, Tallahassee and Pensacola laboratories, the proportion of fecal specimens positive for ascaris is less, and here also, there is no evidence of any reduction. The specimens tested over the period of years reviewed have been drawn from similar sources and examined by the constant technics. It is probable that these crude data provide a significant measure of current trends. The explanation of the difference in these two parasitic infections is not apparent.

The major change in the chemistry laboratory during the year was the substantial increase in the number of blood specimens examined for diabetes case finding. For this special work, budgetary assistance was provided through the Bureau of Special Health Services. As in previous years, the comparatively small number of toxicological and narcotic specimens (1321) represents a heavy volume of work in a very important field.

There was a decline in the number of specimens received for the diagnosis of infections of animals or birds transmissible to man. During 1955 a total of 3433 specimens of this type were received but in the year under review, this dropped to 1360. It is anticipated that there will be a further decline and virtually a termination of this work when the new Animal Disease Diagnostic Laboratory now under construction is completed and placed in operation by the Florida Livestock Board.

Diagnostic services for viral and rickettsial infections first offered in July 1955, developed rapidly during 1956. Excluding rabies examinations, approximately 11,600 tests were performed on specimens from 1233 patients. Table 31 presents the findings by patient. The virological findings of clinical significance are based on the isolation of a pathogenic virus from tissues or the demonstration of a significant rise in antibody titers on testing paired serum specimens taken during the acute and convalescent phases of illness. In a number of instances only single or paired convalescent phase blood specimens were submitted and a significant rise in titer could not be expected. The report of findings sent to the physicians in such cases was limited to the statement that "the findings indicate that the patient had an infection with the virus in question during some period in the past and that the current illness was not necessarily due to this virus." Findings of this type are included in the "doubtful" column of the table.

This bureau received modest budgetary assistance from the USPHS for poliomyelitis diagnostic examinations. A portion of this money was used to pay the salary of one technician in the Virus Diagnostic Laboratory of the Variety Children's Hospital in Miami, directed by M. M. Sigel, Ph.D., Head of the Department of Virology, University of Miami Medical School. That laboratory accepted and examined for poliomyelitis and other neurotropic diseases, specimens from the Broward and Dade County areas. This cooperative arrangement was particularly advantageous since the majority of suspected poliomyelitis patients were admitted to the Variety Children's Hospital in Miami.

Routine rabies diagnostic examinations increased moderately as compared to 1955, although the number of positive animals decreased from 75 in 1955 to 52 in 1956. The figures cited (Table 28) include both wild and domestic animals (excluding bats).

Inadequate animal facilities and insufficient budgetary support continued to limit the diagnostic services in this field. Large numbers of laboratory animals and tissue culture preparations which would cost approximately \$2,000, and expensive viral reagents costing another \$5,000 are required. No budgetary allowance was made in the 1955-57 biennium for these services, and expenditures to cover this operation were drawn from already inadequate laboratory diagnostic funds. These were supplemented during the year by funds received from the USPHS and other sources for special studies. A reasonable expansion of services demands a more adequate budget to provide better animal facilities, needed supplies, and more personnel.

The reference diagnostic services provided through the CDC laboratories of the Public Health Service extended and strengthened the services made available by the state public health laboratories. During the year a total of 666 samples were submitted to the CDC for further study. Most of these were organisms which had been isolated and were referred for definitive typing or confirmatory examination. A majority of the *C. diphtheriae* isolated, and classified by the use of the in vitro virulence test, were referred for confirmatory examination. This new test as performed in our laboratories was found to yield highly dependable findings. A small number of sera were submitted for complement fixation tests for viral diseases, or for the serological examination for evidence of toxoplasmosis. The close working relationship with this reference laboratory has been a source of much satisfaction and valuable assistance.

SPECIAL STUDIES

Special studies continue to play an important role in the accomplishments of this bureau. Approximately \$70,000 was obtained as research grants or allocations for special studies. The weakness of this program is that state funds for basic support have not been available. This is unfortunate since the findings and observations are of particular importance to public health in Florida. Furthermore, opportunities for special studies are essential to develop and maintain a productive professional laboratory staff. This deficiency has been referred to in previous annual reports. Nevertheless, continued progress has been made throughout the year in a variety of laboratory fields.

Working closely with Dr. James O. Bond, epidemiologist, special attention was given to laboratory examination of all known typhoid carriers in the state. (For detailed information as to findings, refer to report of Bureau of Preventable Diseases). The state laboratory continued its role as the "Salmonella" typing center for the hospital, private and state regional laboratories. Similarly, many suspect cultures of *Shigella* were received and identified. Attention was directed to the culturing of enteropathogenic serotypes of *E. coli* in

adults with gastro-intestinal symptomatology. Findings indicated that these organisms which are highly pathogenic when associated with diarrheal diseases of the newborn are not often isolated from adults. These studies were supported by a contract sponsored and approved by the Armed Forces Epidemiological Board.

Mention has been made in the preceding two annual reports of studies of enteric infections in primates conducted at the "Monkey Farm" in South Carolina which is owned and operated by the National Foundation for Infantile Paralysis (NFIP). Bacteriological and therapeutic studies have resulted in the recommendation to the Foundation of a therapeutic regimen which has resulted in reducing the mortality of monkeys by 60 per cent. These animals are heavily infected with *Shigella* and *Salmonella*. The information obtained has been of value in providing healthier monkeys for poliomyelitis vaccine production and it has advanced the epidemiological and therapeutic knowledge of the public health significance of these two pathogenic organisms. Further studies are being pursued to determine the nature, extent and significance of viral agents found in the intestinal tract of monkeys. Since similar agents are being found in humans, the findings will have public health significance.

One additional responsibility has been undertaken for the NFIP which has benefited this bureau. A modern tissue culture laboratory was designed by Dr. Nathan Schneider and built on the grounds of the monkey farm by the NFIP. This laboratory was placed in operation in July 1955 and is designed to salvage kidneys of moribund monkeys by preparing monkey kidney cell suspensions and shipping them to grantee laboratories of the NFIP, including the Florida State Board of Health. This has resulted in making available to this bureau over \$2,000 worth of tissue cultures for use in diagnostic tests for poliomyelitis. Both of the above activities were supported by the NFIP.

In the 1955 annual report, there was reported the initiation of a research grant with the U. S. Air Forces, School of Aviation Medicine, which grant will continue through August 1957. Studies are concerned with the development and evaluation of more rapid laboratory test procedures for certain slow growing bacteria including *M. tuberculosis* and the hemophilus group. Also a screening procedure to differentiate *Salmonella* from certain closely related but nonpathogenic enteric bacteria was evolved and evaluated. Bacteriological research in tuberculosis was carried out in the Jacksonville laboratory under the direction of Miss Mildred B. Jefferies and in the Southwest Tuberculosis Hospital laboratory under the direction of Frank Dunbar and the late Reynolds Davis.

In Jacksonville, where large numbers of sputum specimens are received for the cultural diagnosis of tuberculosis, three culture media (Lowenstein-Jensens, Penicillin Blood Agar, and American

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Trudeau Society) were compared and found to be equally efficacious. This study will be continued employing other commercially available and experimental media.

In the Southwest Tuberculosis Hospital laboratory in Tampa, a standardized method for performing drug sensitivity tests for tuberculosis was developed, evaluation of digestion procedures used in the preparation of sputum samples before culturing for tuberculosis was carried forward, investigation of the nature and significance of certain unclassified mycobacteria which may tentatively be considered as atypical forms of tuberculosis bacilli were studied, and procedures for demonstrating the presence of viable tuberculosis organisms in resected lung tissues were tested. Aside from tuberculosis, there is being studied in Jacksonville more rapid means of performing antibiotic sensitivity tests on slow growing bacteria such as the hemophilus group of organisms.

Rabies in bats in Florida continued to receive the attention of the laboratory. Of approximately 1700 bats examined, 10 were found to be positive for rabies. Total figures since the beginning of this study indicate that 5223 bats have been examined representing eleven species resulting in the finding of 33 positives among seven species. Three of the species of bats in which no rabies were found were examined in small numbers and it is questionable whether they represent adequate size samples. Of interest was the finding of three positive suckling yellow bats of one litter; the mother bat was negative. Further studies of rabies in suckling bats are indicated and will be pursued in the spring of 1957 when they will become available again. Positive bats have been identified more often in areas in Florida in which more rabies-positive animals have been found. This is suggestive evidence that rabies in bats may be related to rabies in other animals. This study is supported by a grant from the National Institutes of Health and is under the joint direction of this bureau and the Division of Veterinary Public Health. (See the latter's report elsewhere in this volume).

Streptococcus grouping and typing service was continued. This is part of a larger study by the National Children's Cardiac Hospital in Miami. Approximately 1200 isolations were subjected to these tests. Those streptococci which could not be typed with antisera available in the Jacksonville laboratory were referred to the CDC in Atlanta for further studies. Funds covering the salary of one technician for the work in Jacksonville was furnished by the National Children's Cardiac Hospital from Miami.

Special studies were carried out in the field of poliomyelitis. Diagnostic procedures for this infection, as for other viral diseases, are highly specialized and very costly. Special tissue culture technics are required. Financial assistance was made available to this bureau by the USPHS. As part of the National Poliomyelitis Surveillance Pro-

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gram of the Federal Government, this laboratory performed diagnostic tests on specimens taken from suspect cases of poliomyelitis in order to determine the safety and efficacy of the Salk vaccine program. A detailed resume of this work is given in the report of the Bureau of Preventable Diseases, elsewhere in this volume. As an additional benefit, diagnostic service for poliomyelitis and related viral diseases of the central nervous system was made available as a routine service to all physicians in the state.

In the 1955 annual report, mention was made of a study to determine the factors which cause congenital malformation. The investigation was limited in extent (pilot study) and was discontinued after USPHS grant funds were exhausted. However, the laboratory continued examination of serum specimens taken from patients participating in this study. Viral diagnostic antigens for use in this study were donated by Lederle Laboratories. It is hoped that funds for studies in this field might be obtained in the foreseeable future so that these studies may be resumed.

Several smaller study projects were undertaken by various sections of this bureau. These include studies on the effect of growth inhibitors in milk, staphylococcus food poisoning, development of rapid test for detection of mastitis infection in milk and detection of coliform contamination in ice used in drinking and eating establishments.

CONSULTATION AND EDUCATIONAL SERVICES

The extent and scope of this work continued in much the same form as was reported in 1955. No additional personnel and funds were available with the result that it has not been practicable to expand these services.

Medical technology workshops were conducted in Jacksonville and Miami. In the former area the workshop consisted of three separate courses in special fields of microbiology, parasitology and syphilis serology. In the latter area there were included similar courses in hematology and mycology. Each student was provided with necessary laboratory facilities, equipment and materials, and received virtually individual instruction. Each course was limited to 20 students. Despite this, there were 120 students registered for the complete courses and an additional 20 or 30 who audited the lectures. The senior staff consisted of five specialists, three from the USPHS, a consultant hematologist from Miami and a bacteriologist from Pfizer Laboratories, Inc. Assistance was provided by the staff of the Jacksonville and Miami laboratories. Cost of these courses were borne in part by fees collected from each student and by monies received as annual renewal fees from licensed technologists by the Board of Examiners in the Basic Sciences. There was in addition, the sub-

stantial contribution of this bureau in employee time, travel and supplies.

This bureau is looked to as a source of educational assistance, reference diagnostic service and consultative guidance on current technical procedures. Three medical technologists were accepted in the Jacksonville laboratories for special instruction and refresher training. In addition, 891 cultures for identification were submitted to our laboratories for additional tests from private and hospital laboratories. In order to evaluate the proficiency of hospital and private laboratories wishing to be approved for premarital and prenatal blood tests, 5270 unknown specimens were submitted to 179 such laboratories. A revised list of approved laboratories as furnished to all County Judges at the end of 1956 is presented as part of this report. In addition to serologic evaluation specimens, 135 laboratories were sent parasitological unknown specimens for check testing. Since the latter were sent only to laboratories wishing to participate on a voluntary basis, it is evident that technical assistance from the Bureau of Laboratories is widely welcomed.

The staff of the bureau was stimulated and strengthened by attendance at out-of-state short courses of training as follows: Miss Justine McCurdy, bacteriologist in the Tampa Regional Laboratory attended a course in the diagnosis of bacterial diseases, and Miss Margaret McLendon, chief of serology, Jacksonville Laboratory, a short course in the *Treponema pallidum* tests for syphilis, both given by the USPHS in Atlanta. Mrs. Frances Van Ness, bacteriologist in the Lantana Regional Laboratory, attended a special one month course on mycology given by Dr. Norman F. Conant at Duke University.

For check testing purposes, the bureau participated in a program initiated by the Public Health Service to test the diagnostic proficiency of viral procedures for the isolation of poliomyelitis and other enteric viruses. Five unknown stool specimens containing multiple viruses were successfully examined and reported. There was a continued participation of the bureau in the national serologic evaluation series sent out by the federal government. Results reported by our laboratories compared very favorably with those obtained by control laboratories throughout the United States. A total of 48 mycological "check test" specimens were received and examined. Our findings as reported to the Communicable Disease Center (control laboratory) were comparable to those obtained by their mycology laboratory.

There was close cooperation between the bureau and the Florida Society of Medical Technologists. Miss Carolyn Roth, as executive secretary of the association, played a major role in planning excellent scientific programs attended by a majority of technologists throughout the state. The newly organized laboratory section of

the Florida Public Health Association served, also, as an excellent place to present scientific programs of value to interested personnel in the laboratory field. Close participation of the three major universities of the state was obtained for the initial meeting of this section of the FPHA.

As a result of the favorable publicity of the Florida workshops, two senior members of the bureau staff, Misses Minnie Schreiber and Carolyn Roth were invited to present talks on such workshops at the annual meeting of the Georgia Medical Technologist Association.

Miss Schreiber continued as editor-in-chief of the "Electro Lyte," a scientific newspaper published by the Florida Society of Medical Technologists. Articles of interest to all medical laboratory members were included in the four editions published in 1956.

Visits to laboratories for consultative assistance was again available on a limited basis. This bureau has specific responsibilities to 39 private clinical laboratories registered with the Board of Health and the 179 (including federal and state laboratories in Florida) which are approved for syphilis serology. In addition, visits were made to the regional laboratories within the bureau and to approximately one-third of the local county health units.

There was continued participation in high school "career day" programs on the subject of medical laboratory work as well as organized tours by high school classes and student nurses of the laboratory facilities of the bureau.

The director has continued as a member of the Commission on Enteric Fevers of the Armed Forces Epidemiological Board. He was selected to participate in meetings of the International Cooperation Administration of the U. S. State Department in Rio de Janeiro and to visit other countries in Central and South America as a consultant for that agency.

Articles by staff members:

1. Hardy, A. V. Changing problems in the bacteriologic diagnosis of tuberculosis. J. Florida M.A. 42:734-738, March 1956.
2. Hardy, A. V. Diarrheal diseases of man: a historical review and global appraisal. Ann. New York Acad. Sc. 66:5-13, Aug. 10, 1956.
3. Hardy, A. V., Schneider, N. J., Mitchell, R. B. Bacteriologic diagnosis of acute diarrheal diseases. School of Aviation Medicine, USAF, Report No. 56-36, 1956.
4. Schneider, N. J., Davis, R., Young, F. L., Yawn, E. C., Mitchell, R. B. An evaluation of the rapid hemoglobin reduction procedure to determine microbial susceptibility to antibiotics. School of Aviation Medicine, USAF, Report No. 56-49, 1956.

5. Kamm, M. H., Wilson, J. B. Differences in oxidative metabolism between virulent and avirulent brucellae. Bacteriological Proceedings, Society of American Bacteriologists, 1956.

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Revision as of January 1, 1956, of Previously Published List of
Laboratories Approved for Premarital and Prenatal Serology

REMOVED

Miami Medical Laboratory, 440 Huntington Building, Miami, Florida
Miss M. L. Everson, c/o Dr. Brown, West Palm Beach, Florida
Tommy Hyatt, Doctor's Clinical Laboratory, Lakeland, Florida
General Hospital of Greater Miami, Coral Gables, Florida
P. H. Pervis, Box 705, Arcadia, Florida
F. G. Pomeroy, 10 South "K" Street, Lake Worth, Florida
Shenandoah Clinic, 1274 S. W. 8th Street, Miami, Florida
Dr. Grover C. Freeman, South Kent Avenue, Lakeland

ADDED

Ski's Laboratory, 680 N. W. 39th Street, Miami, Florida
Fish Memorial Hospital, New Smyrna Beach, Florida
Doctors' Hospital, 300 W. Call Street, Starke, Florida
J. D. Arnold Clinical Laboratory, 5 East Fort King, Ocala, Florida
Medical Arts Laboratory, 1215B N. Orange, Orlando, Florida
Dr. I. C. Frelle, 25 East 2nd Street, Hialeah, Florida
Naples Community Hospital, Naples, Florida
White-Wilson Clinic, Fort Walton Beach, Florida
Victoria Hospital, 930 N. 4th Street, Miami, Florida
Infirmary, University of Florida, Gainesville, Florida
Eugene-Wuesthoff Memorial Hospital, Rockledge, Florida
Pathology Associates Laboratory, 21 E. Copeland Drive, Orlando, Florida

TABLE 26
TOTAL NUMBER OF EXAMINATIONS PERFORMED BY LABORATORIES, 1947-1956

LABORATORIES	YEAR									
	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Jacksonville Central	808,396	845,957	868,359	924,276	1,034,614	1,046,571	1,003,534	940,521	1,028,251	983,244
Tampa Regional	336,750	440,172	445,022	449,490	461,872	454,122	425,492	435,850	486,438	544,368
Miami Regional	227,561	364,739	417,908	447,943	446,462	469,289	380,253	473,812	471,731	499,457
Pensacola Regional	56,726	112,486	128,655	129,266	124,995	145,688	127,639	114,192	129,245	123,023
Tallahassee Regional	18,531	76,691	93,435	112,641	104,843	114,431	123,306	125,634	123,911	112,338
Orlando Regional	—	19,727*	50,208	88,473	132,662	146,606	132,908	122,302	130,517	130,171
West Palm Beach Regional	—	—	—	—	—	15,578**	86,251	174,501	203,667	233,890
Melbourne Hospital	15,461*	58,776	38,564	25,884	23,614	11,303*	—	—	—	—
Pinellas County	—	11,700*	21,317	30,529	26,784	30,011	28,765	21,751	21,636	19,601
Daytona Beach	—	—	—	—	12,463	15,317	8,494	7,983	7,304	7,099
Total Examinations	1,463,425	1,930,248	2,063,468	2,208,502	2,368,309	2,448,916	2,316,642	2,416,546	2,602,700	2,653,191
Total Specimens	• •	• • •	1,002,768	1,072,772	1,071,077	1,088,576	1,060,153	1,132,967	1,187,187	1,234,881

* 6 months operation.

** 3 months operation.

*** Data unavailable.

TABLE 27
EXAMINATIONS PERFORMED BY LABORATORIES, 1956

	Jacksonville	Tampa	Miami	Pensacola	Tallahassee	Orlando	Daytona Bch.	Pinellas	W. Palm Bch.	Totals
SEROLOGY										
Syphilis	430,237	355,706	389,828	82,124	58,660	39,487			51,880	1,407,922
Agglutinations & Related Tests	8,612	1,295	4,461	564	284	506			1,081	16,803
Blood Typing (Rh)	3,399	4,757	3,668	1,007	829	698	9		1,158	15,525
DIAGNOSTIC BACTERIOLOGY										
Diphtheria & Associated Infections	6,605	2,740	371	94	34	869	219		81	11,013
Tuberculosis	91,236	46,398	15,572	6,416	5,360	2,389	64		52,846	144,082
G.C. - Smear	15,839	13,684	3,424	1,356	2,682	1,216	199		903	92,931
Culture	3,051	32,815	6,097	3,592	6,754	25,685			5,544	130,467
Enteric	49,781	82	1,097	97	48	1,693	10		21	4,203
Blood Culture	2,836	232	2,588	811	1,463	15,031	310		158	3,392
Food Poisoning	57	1,354							6,470	39,281
MISCELLANEOUS										
SANITARY BACTERIOLOGY										
Dairy Products	18,572	34,568	34,630	5,635	16,612	13,308	4,166	7,042	29,036	163,569
Water, Drinking & Pools	13,145	12,996	15,980	3,573	5,078	8,539	415	9,273	46,286	115,285
Pollution Surveys	19,881	4,444	4,818	4,435	3,225	3,058		2,610	16,057	58,528
Shellfish	8,901			161	22	854	540	529	331	9,084
Utensils	3,314	200	30		65					5,863
PARASITOLOGY										
Intestinal Parasites	62,535	25,534	11,329	9,415	8,786	15,620	965		4,015	138,199
Malaria	242	177	21	29	16	16			23	525
MYCOLOGY										
Chemistry	8,591	36	14		1,416	448			1,756	12,261
Blood	33,135	6,618	920	3,508	790	533	134		689	46,327
Spinal Fluid	4,670	121	157	11	165	7	68		2,380	5,131
Urine	24		1,181			11				2,495
Toxicology	567		322			1				1,749
Water	2,850		2,729							3,302
Other	6,686									9,432
VETERINARY PUBLIC HEALTH										
VIRAL & RICKETTSIAL										
DIAGNOSTIC SERVICES										
Serology - Neutralizations	3,637									3,637
Isolations (except rabies)	7,963									7,963
Complement Fixation	2,095									2,095
Isolations (except rabies)	962	611	208	195		191				2,167
Rabies - Microscopic	947									947
SPECIAL RESEARCH PROJECTS										
Mouse Inoculation	6,620									6,620
Salmonellosis (Human)										
Okatie Farms	27,371									27,371
Bacteriology	1,265									1,265
Viral Studies	47,845								13,175	61,031
Sensitivity (Antibiotic)	2,535									2,535
Rapid Sensitivity (Air Force)	1,699									1,699
Rapid Urea Studies (Air Force)	35,450									35,450
Streptococcus Typing	3,272									3,272
Bat Rabies	2,927									2,927
Mouse Inoculations	9,100									9,100
Special Studies	2,813									2,813

TABLE 28

SPECIMENS SUBMITTED FOR EXAMINATION BY FINDINGS

Examination	Number of Specimens			
	Positive		Negative	Unsat.
	One or More Positive Findings	Positive for findings indicated		
SEROLOGY	45,208		660,841	12,912
Syphilis	768		4,424	214
Agglutinated & Related Tests		497		
Typhoid		30		
Typhus		122		
Brucellosis		20		
Tularemia		104		
Heterophiles		33		
Other				14,280
Blood typings (Rh)				
DIAGNOSTIC BACTERIOLOGY	960		3,483	4
Diphtheria and Associated Infections		150		
C. diphtheria		58		
Vincent's		416		
Streptococci		416		
Other	4,963		41,583	1,865
Tuberculosis		4,702		
Sputum		9		
Urine		161		
Gastric		13		
Pleural Fluid		14		
Exudate		64		
Other		36		61
Animal Inoculation			25	
Gonorrhea - Smears	26,873		31,363	426
Intracellular Gram Negative diplococci		4,901		
Extracellular Gram Negative diplococci		845		
Trichomonads		4,863		
Yeasts		2,420		
Vincent's organisms		468		
Many Pus Cells		14,310		
Gonorrhea - Cultures	963		21,478	188
Enteric Infections	453		41,838	120
S. typhosa		120		
Other Salmonella		264		
Shigella (Flexner & Sonnei)		60		
Blood Cultures	40		354	2
Salmonella		2		
Brucella		0		
Other		40		
Food Poisoning	50		420	
Staphylococci		33		
Other		21		
Miscellaneous	3,568		3,109	46
Darkfield - T. pallidum		8		
Chancroid - Ducrey's		8		
Granuloma - Donovan Bodies		4		
Gonococcus in eye		31		
Other eye smears		167		
Other eye cultures		26		
Urine cultures		542		
Spinal fluid cultures		13		
Pleural fluid cultures		67		
Other fluids & exudates		525		
Mycological Examinations		1,036		
Organisms for identification		318		
Other Examinations		823		
SANITARY BACTERIOLOGY				28,654
Dairy Products				61,621
Water, Drinking & Pools				6,717
Water, Pollution Surveys				212
Shellfish				3,771
Utensil Swabs				

TABLE 28 (continued)
SPECIMENS SUBMITTED FOR EXAMINATION BY FINDINGS

Examination	Number of Specimens				
	Positive		Negative	Unsat.	Total
	One or More Positive Findings	Positive for findings indicated			
PARASITOLOGY	24,908		108,114	1,490	134,512
Intestinal Parasites		10,689			
Hookworm		4,710			
Ascaris		2,868			
Enterobius		785			
Trichuria		2			
Taeniae		372			
Other Helminths		245			
E. histolytica		5,530			
Non-pathogenic ameba		4,047			
Flagellates		125			
Others	6		298	7	311
Malaria		4			
P. vivax		2			
Other					
CHEMISTRY					39,175
Blood					2,251
Spinal fluid					299
Urine					1,228
Water					1,321
Toxicology & narcotics					7,890
Other					
VETERINARY PUBLIC HEALTH	516		781	63	1,360
Specimens Examined					
VIRAL & RICKETTSIAL DIAGNOSTIC SERVICES					474
Serology - Neutralizations					2,027
Complement Fixation					503
Isolations (except rabies)					1,151
Rabies (Total)	53*		1,053	45	
Dogs		10			
Cats		10			
Cattle		4			
Foxes		14			
Horses		1			
Raccoons		13			
Bats		1			
Mouse Inoculations					934
SPECIAL RESEARCH PROJECTS					442
Salmonellosis (Human)					
Okatie Farms					3,971
Bacteriology					405
Viral Studies					2,573
Sensitivity (Antibiotic)					165
Rapid Sensitivity (Air Force)					582
Rapid Urea Studies (Air Force)					1,197
Streptococcus Typing					1,637
Bat Rabies					2,923
Mouse inoculations		9*	2,914		891
Special Services					954
Dental Caries					1,873
Congenital Malformation Studies					
GRAND TOTAL SPECIMENS RECEIVED					1,234,881

* Total positive for rabies 62.

TABLE 29
PERCENTAGE OF SPECIMENS EXAMINED FOR M. TUBERCULOSIS
AND FOUND TO BE POSITIVE 1949-1956

Year	All Specimens	Sputum	Gastric	Other
1949	11.8	12.0	8.3	3.7
1950	15.5	13.1	8.5	1.7
1951	15.9	16.1	10.9	7.3
1952	14.8	15.0	17.7	6.6
1953	12.1	12.8	9.7	5.3
1954	10.8	11.0	13.3	2.9
1955	8.2	8.9	7.9	1.9
1956	8.8	9.0	8.0	4.5

TABLE 31
VIRAL AND RICKETTSIAL DIAGNOSTIC FINDINGS
BY PATIENT IN 1956

	Positive	Negative	Doubtful	Total
Lymphocytic choriomeningitis		88	1	89
Mumps	23	73	20	116
Eastern equine encephalomyelitis		83		83
Western equine encephalomyelitis		78		78
St. Louis encephalomyelitis		72		72
Herpes Simplex	8	14		22
Poliomyelitis Type 1	27	153	7	187
Poliomyelitis Type 2	20	162	4	186
Poliomyelitis Type 3	9	171	5	185
Murine Typhus		9	1	10
Rickettsial Pox		8	2	10
Rocky Mt. Spotted Fever		1	2	3
Q Fever		28	1	29
Influenza A	2	21	7	30
Influenza A1	2	13	5	20
Influenza B	1	25	2	28
Psittacosis		7	1	8
LGV	2	28	2	32
Other	4	40	1	45
Totals	98	1074	61	1,233

TABLE 30
PROPORTION OF FECAL SPECIMENS FOUND POSITIVE FOR
HOOKWORM AND ASCARIS, BY LABORATORY, 1949-1956

LABORATORY	PER CENT POSITIVE FOR HOOKWORM								PER CENT POSITIVE FOR ASCARIS							
	1949	1950	1951	1952	1953	1954	1955	1956	1949	1950	1951	1952	1953	1954	1955	1956
Total	18.8	18.8	14.3	12.5	11.1	13.9	11.2	8.9	3.1	3.3	3.8	4.1	4.5	6.4	4.6	4.1
Jacksonville	16.4	17.3	14.1	11.9	9.9	13.4	11.0	7.5	3.3	4.3	4.3	4.5	5.6	7.9	5.2	4.4
Miami	4.9	4.0	3.7	2.5	3.1	3.1	3.9	3.7	5.3	4.3	8.7	8.9	5.1	6.4	7.3	5.9
Tampa	20.3	20.0	16.5	16.6	17.7	21.4	17.4	15.8	3.7	3.4	3.6	4.1	5.6	8.6	6.2	6.3
Orlando	12.6	8.1	6.6	7.4	7.2	6.3	4.0	5.0	1.3	1.0	0.9	1.0	1.0	.9	.9	1.1
Pensacola	32.3	34.0	23.5	19.4	13.9	15.6	13.9	11.5	1.0	1.1	1.6	1.4	1.3	1.9	2.2	1.7
Tallahassee	20.4	24.0	16.4	14.2	12.8	19.1	13.6	12.6	1.8	0.8	1.0	1.4	2.5	4.2	2.4	1.9
West Palm Beach	-----	-----	-----	-----	4.2	6.7	7.3	2.9	-----	-----	-----	-----	3.1	6.2	7.8	4.9

BUREAU OF SPECIAL HEALTH SERVICES

L. L. PARKS, M.D., M.P.H.
 Director

This bureau was organized on July 1, 1956. The new bureau was brought about through a reorganization and actually did not mean new services in the State Board of Health. It includes the Division of Hospitals and Nursing Homes, the Division of Chronic Diseases, which is composed of Cancer, Heart and Diabetes, the Division of Nutrition and Civil Defense.

The services rendered in 1956 by each of these divisions are described in the following pages of this bureau's report.

The activities under *civil defense* were limited inasmuch as no funds or personnel were available for this service; however, the director of the bureau was designated liaison officer with the State Civil Defense Office; data pertaining to the health and medical services and facilities in Florida was assembled and submitted to it. A number of conferences were held during the year with the State Director of Civil Defense. Each county health department director has been asked to appoint a member of his staff to be primarily responsible for the county health department's duties in civil defense. Plans were made for some training for those members of the health department staff having civil defense responsibilities in addition to other duties, and a short training course is planned for January 1957. Some minor assistance was rendered the state civil defense director during the state and federal field exercise.

DIVISION OF HOSPITALS AND NURSING HOMES

L. L. PARKS, M.D., M.P.H.
 Director

A. Hospital Service For The Indigent

The Act of the 1955 Legislature establishing the new program "Hospital Service for the Indigent" provided that it become effective January 1, 1956. In lieu of the \$3,000,000 requested for the operation of the program, \$500,000 was appropriated. It appeared to be the thinking of the Legislature that this reduced initial appropriation would be sufficient to establish the administration of the program and to provide operational experience, looking forward to adequate financing by the 1957 Legislature.

Because of the small amount of state funds involved, only twenty-four counties elected to establish hospital care programs for their indigent under the provisions of the law. These 24 counties are

as follows: Alachua, Bay, Bradford, Brevard, Collier, Duval, Flagler, Franklin, Gadsden, Glades, Gilchrist, Hendry, Jackson, Levy, Liberty, Manatee, Marion, Martin, Polk, Pinellas, Sarasota, St. Johns, St. Lucie and Volusia. Had all counties elected to participate, each would have received only eight cents per capita in state funds for the minimum fifty cents per capita in county funds required for its participation. However, because only 24 counties participated there were sufficient state monies to provide twenty cents per capita to each participating county.

The 1956 special session of the Legislature adopted a Resolution authorizing the State Welfare Department to utilize certain unencumbered state funds together with federal matching funds to establish "The Public Assistance Medical Service Fund". From this fund the State Welfare Department was authorized to provide services for state welfare recipients in accordance with the provisions of the 1955 Act, "Hospital Service for the Indigent". Thus the State Board of Health and its affiliated county health departments became responsible for the medical administration of the program initiated October 1 by the State Welfare Department for the hospital care of public assistance recipients. Because approximately one-third of all the medically indigent citizens of Florida are public assistance recipients, the State Welfare Department's program is meeting approximately one-third of the total need in all counties of the state.

Because of the State Welfare Department's program for public assistance recipients and the State Board of Health's program for the medically indigent are both administered under the provisions of the same state statute, it is possible to present a single program to the hospitals and physicians of the state using identical forms and regulations. In order that both state departments might proceed with common administrative policies, the respective Medical Advisory Committee to both of these state departments met jointly in September to consider problems common to both programs.

Federal matching funds utilized by the State Welfare Department can be paid only to "licensed hospitals" for the care of public assistance recipients. The provisions of Florida's Hospital Licensure Law apply only to "those hospitals receiving federal aid or aid from the United States Government." Because of this restriction, the State Board of Health has in prior years licensed only those Florida hospitals which have received Federal Hill-Burton Hospital Construction grants. By giving a broader interpretation to the several types of federal aid a hospital may receive, all hospitals are now considered subject to licensure which receive surplus property, surplus commodities, or payments from the State Welfare Department for the care of public assistance recipients. With this interpretation most of the Florida hospitals are now subject to licensure by

the State Board of Health and, therefore, may be utilized by the State Welfare Department for the care of public assistance recipients.

In summary, this has been a year of intense work in the development of Florida's first hospital care program for its medically indigent citizens. The state-county financed program is in operation in 24 counties. The federal-state financed program for public welfare recipients is in operation in all counties. The rules and regulations governing the administration of the program and the method of payment to hospitals have been completed and administrative problems corrected as they became evident. A substantial foundation has been laid for a practical, conservative hospital care program for the indigent. This accomplishment is the result of outstanding assistance received from the appropriate committees of the Florida Medical Association and the excellent cooperation received from Florida physicians, health officers and hospitals.

The average cost per patient day, as shown in the Summary of Activities, is less than the actual cost of services provided, because hospitals which have not submitted their required certified statement establishing their per diem cost have been limited to a maximum payment of \$15.00 per day. The average per diem for those hospitals which have submitted cost statements is approximately \$22.00 per day.

TABLE 32
SUMMARY OF ACTIVITIES
HOSPITAL SERVICE FOR THE INDIGENT
EXPENDITURES
January 1, 1956 thru December 31, 1956

	County Funds Expended	State Funds Paid to Counties	Total Funds Expended for Hospital Care
1st Quarter.....	\$ 58,548.71	\$ 13,499.50	\$ 72,048.21
2nd Quarter.....	98,100.09	44,116.41	140,216.50
3rd Quarter.....	103,176.54	57,031.14	160,207.68
4th Quarter.....	118,142.89	63,195.25	181,338.14
Total Expenditures.....	\$ 375,968.23	\$ 177,842.30	\$ 553,810.53

SUMMARY OF HOSPITALIZATION PROVIDED

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
No. of Patients Receiving Hospital Care.....	515	669	1,052	1,125	3,361
No. of Days Care Rendered.....	4,996	8,034	9,123	11,167	33,320
Average Stay Per Patient—days.....	9.7	12	8.7	9.9	9.9
Average Cost Per Patient.....	\$139.90	209.59	\$152.29	\$161.19	\$164.77
Average Per Diem Per Patient.....	\$14.42	\$17.45	\$17.56	\$18.24	\$16.62
Race: White.....	307	357	535	600	1,799
Colored.....	208	312	517	525	1,562
Sex: Male.....	247	347	415	506	1,515
Female.....	268	322	637	619	1,846
Type of Indigent Patient:					
State Welfare Recipient.....	136	154	225	—	—
Non-State Welfare Recipient.....	290	231	518	1,125*	3,361*
Undetermined.....	89	284	309	—	—
Age: 0-20.....	161	148	311	298	918
21-64.....	240	345	528	629	1,742
65 Plus.....	114	176	213	198	701

* State Welfare Recipients not accounted for after October 1, 1956. (See DPW report).

B. Nursing Homes and Homes For The Aged

The nursing home law was passed by the 1953 Legislature. After a general state survey was made of the nursing homes and homes for the aged in 1953 and 1954 by representatives of the State Board of Health, the responsibility for enforcement of this law was delegated to the county health departments.

Efforts have been made to educate and encourage nursing home operators to meet the required standards; however, during the past two years it has been necessary to disapprove continued operation of a few of these homes.

Nurses and sanitarians of the Field Advisory Staff have acted as consultants to the county health departments when called upon or when there were special problems in the counties. On July 1, 1956, the Bureau of Special Health Services was given the responsibility of the nursing home program and issuing of licenses upon recommendation of county health departments; however, it was also given the direct responsibility for the licensing and inspection of the homes in the City of Jacksonville. There has been excellent cooperation with the City of Jacksonville Fire Department, Building Department, Zoning Department and Electrical Department in this program. A full-time person was employed in the Bureau of Special Health Services in October to assist in this program in Jacksonville.

At the end of 1956 there were 297 licensed nursing homes and homes for the aged in the state, with a total of 7160 beds (6489 white - 366 colored) and 305 combination - white and colored.

The educational program for nursing home operators has been limited during the year to individual instruction, except for one meeting which was held prior to the meeting of the Florida Public Health Association in Clearwater. This meeting was primarily for health workers but several nursing home operators were present. It is hoped that an educational program can be given more attention in the future. A monthly publication, *Living in Later Years*, is written and distributed each month to nursing home operators. It serves as a means of distributing informational and educational material uniformly to the nursing home operators.

Efforts are being made to see that the residents and patients of the nursing homes and homes for the aged are given reasonable care. This includes a sanitary environment, proper nutrition, nursing care, fire protection, accident prevention and attention to the general welfare of the individual. Some homes have developed excellent programs for rehabilitation of the aged. It is hoped that these programs will become more widespread. The need for planned recreation in nursing homes has been recognized and it is anticipated that provisions for it will become more common in the future. However, the size of the present Field Advisory Staff and limited funds do not permit consideration of these and other problems at this time.

DIVISION OF CHRONIC DISEASES

L. L. PARKS, M.D., M.P.H., Director

Diabetes Control

The diabetes program consisted primarily of the distribution of insulin and educational material on the same basis as last year. More attention should have been given to this program as diabetes was the ninth leading cause of death in the state, but funds were not available for an adequate detection program.

Insulin Distribution: Insulin was distributed to indigent diabetics through the county health departments or their approved clinics. The determination of indigency was left to each health department. Distribution was done on a quota basis since the demand for insulin exceeded the funds available for supply. Each health department requisitioned the type and amount of insulin within their allocation from the central office.

During the fiscal year 1955-56, a total of 29,475 vials of insulin was distributed to all the counties. This represented 18,725,600 units at a total cost of \$35,124.17. Insulin was distributed to 2566 diabetics.

Educational Activities: A monthly bulletin, *Timely Topics*, was published regularly during the year. This bulletin, which covered subjects of general interest to the diabetic, was distributed to 2300 laymen and physicians.

In cooperation with the Florida Medical Association and the Department of Medicine, Graduate School, University of Florida, the division assisted in bringing two outstanding speakers to the fourth annual meeting of the Florida Clinical Diabetes Association.

Plans were made for holding a regional diabetes meeting in Tampa in January, 1957. The purpose of this meeting is to stimulate more interest in diabetes control, not only in Florida but in the surrounding states, inasmuch as Florida is doing more diabetes control work than the other states in this area.

Assistance with diabetic diets has been given county health department personnel by staff members of the Division of Nutrition.

Diabetes Detection was virtually non-existent during 1956 because of lack of personnel and funds. Blood sugar tests were made by the Division of Venereal Disease Control in connection with serological surveys. The report of these surveys is given in that division's report. The staff of the Division of Nutrition assisted the lay diabetes associations in the various parts of the state in carrying on educational programs.

Heart Disease Control

S. D. DOFF, M.D., M.P.H.,

Director

JOHN S. TURNER, M.D.

Concisely defined, the Heart Disease Program deals with measures for the prevention of heart disease or the prevention of disability and untimely death due to heart disease. The classes of heart disease involved chiefly are rheumatic, coronary and hypertensive. Various activities carried out, encouraged or sponsored by the State Board of Health, are methods whereby the objectives of control may be achieved.

Nationwide progress is being made in the development of methods which, properly applied, will prevent heart disease as in the case of rheumatic heart disease, or prevent serious disability and untimely death as in the case of coronary and hypertensive heart disease. The following is an account of investigations from which it is hoped that new methods of control will be designed and a description of the application of methods already developed.

Results of a study among children in the Florida State School for the Deaf and Blind were presented to the Florida Chapter of the American College of Chest Physicians. The high prevalence of congenital heart disease in the group suggested that a common factor was the cause for the blindness or deafness and the heart condition in many cases. The experience suggested further that finding a malformation in one organ system of an individual should occasion a search for other malformations in the same person. The detection of correctable cardiac malformations in these children seemed particularly desirable from the economic as well as the medical-social point of view. This study has been prepared for publication.

Effective use for heart case finding of 70 millimeter photo-fluorograms taken for tuberculosis case-finding has been the subject of considerable debate for the past seven years. Over a two-year period, the 70 millimeter films of persons under fifty years of age, suspected of showing heart involvement, were collected. Follow-up data obtained through the efforts of county health department personnel revealed that the percentage of persons so reported was extremely small in relation to the total population surveyed; however, 13 per cent of persons on whom information was received proved to have previously unknown heart disease. On the basis of studies reported from the USPHS employment of special readers would probably increase the number of abnormal 70 millimeter films threefold and the yield of verified cases previously unknown threefold.

A study of the natural history of rheumatic fever among residents of Florida has been initiated by the organization of a rheumatic

fever case register. The frequency with which rheumatic fever recurs in persons who have had one or more previous attacks will be documented. The effect of prophylactic penicillin is being studied and a comparison will be made between the experience among native born Floridians and persons who have suffered rheumatic fever elsewhere and who have moved to Florida in hopes of avoiding the danger of rheumatic fever recurrence. It is anticipated that a five-year experience will be necessary before analysis of the data can be expected to yield worthwhile information. Published in the August 1956 issue of Public Health Reports was the result of a bacteriologic and serologic investigation among school children in Miami, Florida. The study carried out by the National Children's Cardiac Hospital and the Dade County Health Department, was supported by funds from the State Board of Health. The group A beta hemolytic streptococcus was isolated at least once from the throats of 36 per cent of the children studied during an eight-month period. Anti-streptolysin O titers of these children were higher than in a control group. The findings are discussed from the standpoint of possible host-parasite-environment relationships which would explain the fact that none of the children developed rheumatic fever.

A cardiac work classification unit has been organized with the cooperation of the Northeast Florida Heart Association and the Duval Medical Center and will hold a first session in January 1957. The personnel include the clinical director, vocational rehabilitation counselor, medical social worker and clerk-stenographer. The relationship of such a clinic to other agencies in the community involved in rehabilitation are to be developed. The unit represents an activity which will be watched with keen interest by the other areas of the state with a view toward providing a similar service to cardiacs disabled for work.

In the area of education, the Fourth Biennial Cardiovascular Seminar for Physicians was held in Miami with 250 physicians in attendance for the three-day session. Since the initiation of this Seminar, three communities under the sponsorship of local heart associations (and, in one case, with added sponsorship from the Florida State Board of Health) have held seminars annually for physicians in their areas. Post-graduate education for nurses has been made available through the use of heart funds making it possible for nurses to attend approved courses in heart disease control for public health nurses as well as courses in dealing with physical medicine and rehabilitation. Audio-visual materials, which have been provided through the use of Heart Disease Control funds, have continued to be extremely popular with physicians and nurses throughout the state. For the first time a mobile heart library containing the latest textbooks for physicians and nurses has been made available on loan to small hospitals not providing library facilities. It is hoped that this will encourage these institutions to provide physicians and nurses

with such materials. Little needs to be said concerning the value of a medical library, however small, to a hospital staff.

In the current year, three additional counties - Hillsborough, Orange and Jackson have organized themselves through the efforts of local heart associations and the county health departments to develop cardiac clinic service for the indigent. It is felt that the present network of ten clinics, together with those which may be added in the near future, will provide an effective group for carrying out investigations designed to develop new methods for the control of the most common forms of heart disease.

In August 1956 the staff of the Heart Disease Control program was augmented by a loan to the State Board of Health from the USPHS of Dr. John Turner who has carried out effectively many duties relating to the activities described above.

Cancer Control

During the past year, 5694 individuals of Florida's population of 3,886,600 died with cancer. It is the purpose of the Cancer Control Program to prevent as many of these deaths as possible in the following ways:

1. Early diagnosis and treatment of the patient through tumor clinics and hospitalization of cases.
2. Physician refresher courses.
3. Education of the public on the importance of seeking medical care in suspected cancer by means of movies, pamphlets, talks or exhibits.

The major portion of the activities dealt with the patient and his treatment, through the cooperation of the private physicians who donate their services to this program. Cases receiving aid were limited to those medically indigent persons who were suspected of having cancer, and who appeared to have a reasonable hope for recovery. Funds were available only for diagnostic studies, rental of radium, and hospitalization. A total of \$236,485.87 was spent. This expenditure by county, is shown in Table 37.

During the year, nineteen Tumor Clinics of Florida provided diagnostic and treatment services for over 2221 individuals in the State Aid Program. This included 1840 new potential cases of cancer, 891 of which were found to have the disease. (See Table 37). No new clinics were established during the year.

A total of 6591 cases of cancer were reported for Florida, but, as in the past, the vast majority of these reports was obtained from death certificates, and the figure actually represents only a small portion of the cases occurring.

A three-day cancer seminar was held in Jacksonville, and 19 physicians from various medical schools and hospitals whose work in the field of cancer has been outstanding spoke to the 374 attending physicians. Representatives from 14 states were present.

In cooperation with the American Cancer Society, Florida Division, films were made available and pamphlets were distributed to various groups over the state. The Cancer Society also provided funds for the payment of salaries of some of the tumor clinic secretaries, for the transportation and board of selected patients attending the clinics, as well as for supplies in the tumor clinics.

The following tables show much the same trends presented in the tabulations of past years' reports. The percentage of malignancies found in new State Aid cases continues to decrease. This is indicated in Table 33. The high rate of unknown diagnoses for 1956 results from those new cases entering the program during the latter part of the calendar year for whom a final diagnosis was not available at this writing.

Although there seems some variation from year to year in the number of patients lost to follow-up, Table 35 shows that only 2 to 3 per cent of all malignant cases receiving financial assistance are lost during the first year in the program, and only an additional 4 to 6 per cent are lost to follow-up during the next four years.

Table 36 represents the percentage of cases, by site, surviving from one to five years. It may be observed that 27 per cent of the cases expire during the first year and an additional 28 per cent expire during the following four years. The digestive and respiratory systems represent the site of poorest survival at the end of five years. As might be expected, the skin cases show the highest survival rate -- 71 per cent after five years and female genital cases, 43 per cent after five years.

TABLE 33

DISTRIBUTION BY DIAGNOSTIC STATUS, RACE AND SEX OF PERSONS APPROVED FOR STATE AID UNDER THE FLORIDA CANCER PROGRAM DURING THE YEARS 1947* - 1956

RACE, SEX AND YEAR	DIAGNOSTIC STATUS									
	Number of Persons					Percentage Distribution				
	Number Approved	Cancer	Pre-Cancerous	Non-Malignant	Unknown	Number Approved	Cancer	Pre-Cancerous	Non-Malignant	Unknown
Total persons.....	14,567	7,855	44	5,456	1,212	100.	53.9	0.3	37.5	8.3
1947*	205	163	—	37	5	100.	79.5	—	18.0	2.4
1948	1,352	823	3	409	117	100.	60.9	0.2	30.3	8.7
1949	1,060	646	2	331	81	100.	60.9	0.2	31.2	7.6
1950	1,687	929	5	611	142	100.	55.1	0.3	36.2	8.4
1951	1,639	934	6	575	124	100.	57.0	0.4	35.1	7.6
1952	1,677	875	8	623	171	100.	52.2	0.5	37.1	10.2
1953	1,644	845	14	632	153	100.	51.4	0.9	38.4	9.3
1954	1,595	822	2	694	77	100.	51.5	0.1	43.5	4.8
1955	1,868	927	3	856	82	100.	49.6	0.2	45.8	4.4
1956	1,840	891	1	858	260	100.	48.4	0.1	37.4	14.1
White Male	4,600	2,878	19	1,324	379	100.	62.6	0.4	28.8	8.2
White Female	6,242	3,155	22	2,605	460	100.	50.5	0.4	41.7	7.4
Colored Male	1,202	582	1	484	135	100.	48.4	0.1	40.3	11.2
Colored Female	2,523	1,240	2	1,043	238	100.	49.1	0.1	41.3	9.4

*1947 total includes 7 persons approved for State Aid in November and December, 1946.

TABLE 34

DISTRIBUTION ACCORDING TO SITE, RACE AND SEX OF CANCER CASES ADMITTED TO THE FLORIDA STATE AID CANCER PROGRAM DURING THE YEARS 1947* - 1956

SITE	NUMBER OF PERSONS					PERCENTAGE DISTRIBUTION				
	Total	WM	WF	CM	CF	Total	WM	WF	CM	CF
Total.....	7,855	2,878	3,155	582	1,240	100.	100.	100.	100.	100.
Buccal Cavity	507	310	98	58	41	6.5	10.8	3.1	10.0	3.3
Digestive System	782	284	221	189	88	10.0	9.9	7.0	32.5	7.1
Respiratory System	475	310	61	87	17	6.0	10.8	1.9	14.9	1.4
Breast	789	4	486	6	293	10.0	0.1	15.4	1.0	23.6
Female Genital	1,760	—	1,101	—	659	22.4	—	34.9	—	53.1
Male Genital	215	106	—	109	—	2.7	3.7	—	18.7	—
Urinary	228	121	54	31	22	2.9	4.2	1.7	5.3	1.8
Skin	2,604	1,554	974	37	39	33.2	54.0	30.9	6.4	3.1
Other Sites	327	119	113	42	53	4.2	4.1	3.6	7.2	4.3
Lymph. and Haem. Tissues	168	70	47	23	28	2.1	2.4	1.5	4.0	2.3

*Includes 6 persons approved for State Aid in November and December, 1946.

TABLE 35

NUMBER AND PERCENTAGE OF CANCER CASES UNTRACED AFTER EACH YEAR OF FOLLOW-UP ACCORDING TO CALENDAR YEAR OF ENTRY TO PROGRAM

Calendar Year	Cases Entering Program During Calendar Year	CUMULATIVE CASES UNTRACED AFTER EACH YEAR OF FOLLOW-UP									
		Number					Percentage				
		1st year	2nd year	3rd year	4th year	5th year	1st year	2nd year	3rd year	4th year	5th year
1947*	149	7	8	8	8	8	4.7	5.4	5.4	5.4	5.4
1948	737	26	35	45	54	56	3.5	4.7	6.1	7.3	7.6
1949	592	15	28	43	50	57	2.5	4.7	7.3	8.4	9.6
1950	825	19	31	37	41	51	2.3	3.8	4.5	5.0	6.2
1951	815	23	37	53	70	---	2.8	4.5	6.5	8.6	---
1952	733	14	29	50	---	---	1.9	4.0	6.8	---	---
1953	661	10	21	---	---	---	1.5	3.2	---	---	---
1954	569	15	---	---	---	---	2.6	---	---	---	---

Based on follow-up experience of 5,081 cases receiving monetary assistance during the year of admission under the Florida State Aid Cancer Program, 1947* - 1954.

*Includes 5 cases approved for State Aid in November and December, 1946.

TABLE 36

PER CENT OF CANCER PATIENTS SURVIVING AFTER EACH YEAR OF FOLLOW-UP, BY SITE

SITE	PER CENT SURVIVING AT				
	1 Year	2 Years	3 Years	4 Years	5 Years
Total	73.4	61.4	54.1	49.3	45.5
Buccal Cavity	68.7	52.6	45.2	40.2	37.6
Digestive System	37.2	25.6	19.2	15.1	12.4
Respiratory System	35.3	24.5	17.7	13.9	12.6
Breast	76.8	62.1	51.1	43.2	37.6
Female Genital	73.5	57.2	49.7	45.5	42.8
Skin	94.1	87.6	81.4	76.2	71.2
Other Sites (Residual)	58.9	43.4	35.1	31.6	27.7

Based on follow-up experience of 5,081 cancer cases receiving monetary assistance during the year of admission under the Florida State Aid Cancer Program, November 1946 through December 1954. (Excludes those refusing treatment.)

TABLE 37

NEW PERSONS APPROVED FOR STATE AID, NUMBER OF PERSONS RECEIVING FINANCIAL AID, AND EXPENDITURES, BY COUNTY
FLORIDA CANCER PROGRAM 1955 AND 1956

County	New Persons Approved		Persons Receiving Aid		Total Expenditures	
	1955	1956	1955	1956	1955	1956
TOTAL	1868	1840	1920	2221	\$ 209,049.67	\$ 236,485.87
ALACHUA	27	26	33	28	2,905.29	2,530.25
BAKER	14	15	9	10	559.25	723.27
BAY	32	40	39	55	3,313.25	9,618.50
BRADFORD	18	21	17	21	2,722.85	2,330.70
BREVARD	15	20	10	17	2,075.06	894.37
BROWARD	37	60	35	37	3,438.08	3,735.00
CALHOUN	22	20	21	13	2,621.97	934.62
CHARLOTTE	13	12	9	9	1,100.38	599.14
CITRUS	6	9	4	4	358.75	420.50
CLAY	18	10	18	13	1,219.15	1,528.18
COLLIER	20	15	20	17	4,579.25	834.00
COLUMBIA	32	21	20	20	2,355.44	3,052.39
DADE	122	146	246	401	28,424.60	40,571.71
DeSOTO	17	11	8	8	902.75	433.90
DIXIE	10	4	8	3	124.50	64.75
DUVAL	27	57	37	280	6,100.74	32,236.92
ESCAMBIA	119	99	104	91	10,493.76	8,090.95
FLAGLER	7	3	4	2	313.50	163.42
FRANKLIN	14	24	14	20	1,631.79	2,320.36
GADSDEN	35	26	24	21	597.75	1,703.02
GILCHRIST	8	10	4	6	288.66	99.21
GLADES	2	---	1	---	85.00	120.00
GULF	12	19	18	12	2,026.77	735.45
HAMILTON	13	13	12	14	1,642.21	853.40
HARDEE	13	14	8	7	660.25	305.00
HENDRY	7	2	5	2	120.00	187.00
HERNANDO	12	5	6	6	582.75	769.75
HIGHLANDS	24	9	18	9	3,432.64	601.05
HILLSBOROUGH	162	208	193	216	19,527.35	25,330.20
HOLMES	33	25	33	21	2,069.00	1,750.75
INDIAN RIVER	10	12	11	10	1,391.25	837.50
JACKSON	58	33	43	36	4,624.81	3,422.63
JEFFERSON	10	10	12	5	483.64	329.74
LAFAYETTE	8	2	4	3	797.00	140.73
LAKE	21	21	18	17	2,170.26	1,824.84
LEE	28	19	12	11	2,196.33	1,706.24
LEON	39	36	43	37	2,482.84	3,070.15
LEVY	11	9	11	10	913.17	1,615.76
LIBERTY	7	13	5	9	568.57	352.49
MADISON	19	32	23	26	2,135.70	2,439.42
MANATEE	39	39	33	32	5,418.15	5,076.30
MARION	11	14	13	8	936.95	833.90
MARTIN	9	6	5	2	1,009.75	43.10
MONROE	54	24	46	34	8,054.75	4,011.00
NASSAU	24	26	23	19	2,096.07	716.16
OKALOOSA	44	33	32	21	2,208.45	1,202.50
OKEECHOBEE	8	3	1	2	136.00	153.00
ORANGE	66	57	58	64	6,737.80	9,050.51
OSCEOLA	18	11	11	8	830.92	1,157.24
PALM BEACH	45	52	55	62	4,069.75	4,960.25
PASCO	31	37	27	31	3,020.34	4,332.55
PINELLAS	58	69	64	46	9,770.55	6,507.20
POLK	52	74	69	92	7,183.88	7,776.45
PUTNAM	40	40	51	42	4,082.38	4,625.67
ST. JOHNS	14	8	13	15	2,254.55	3,839.47
ST. LUCIE	15	11	16	11	1,502.50	1,047.75
SANTA ROSA	29	25	34	19	1,893.73	2,011.75
SARASOTA	14	20	18	16	1,342.50	1,007.96
SEMINOLE	32	21	24	27	3,852.79	2,022.57
SUMTER	23	12	16	7	2,084.41	617.17
SUWANNEE	26	21	29	26	1,674.50	4,112.78
TAYLOR	20	23	20	25	1,388.05	2,535.50
UNION	8	4	8	5	225.50	1,281.06
VOLUSIA	33	34	45	34	6,947.27	5,569.74
WAKULLA	7	6	5	6	698.83	755.50
WALTON	19	25	14	19	2,096.50	1,456.00
WASHINGTON	27	14	30	21	2,433.89	505.53
RADIUM RENTAL:					1,062.50	---

DIVISION OF NUTRITION

MARJORIE M. MORRISON, M.S.
Chief Nutrition Consultant

This division has been handicapped by personnel turnover during the year. Two of our former staff members resigned; of three new people employed during the year, only one was on duty at the end of the year. For this reason, nutrition service has not been as consistent as it was last year.

Services to local health units have centered primarily in the nursing division of the departments. Family food budgets and special diet problems have taken precedence over other problems.

In several of the larger counties, the nutritionist has served as a part of the team inspecting nursing homes. Individual visits have been arranged to numerous homes at the request of the operator. On the basis of information requested by nursing home operators, a manual for food service was prepared by the staff of this division and distributed to all licensed homes through the county health departments. Service to nursing homes is the phase of our program which has shown the greatest growth during the past year.

Cooperation with other state agencies has continued. Among those whom were offered service, either by teaching or consultation, are the following: State Welfare Board, Florida Citrus Commission, Florida Children's Commission, Florida Crippled Children's Commission, Florida State Hospital, Florida Tuberculosis Hospitals, Florida State University, Florida A. & M. University, Agricultural Extension - Home Demonstration Office, State Road Department - Prison Camp Division, State Department of Education - Vocational Rehabilitation and School Lunch Divisions.

Of these, the greatest amount of time was given to the State School Lunch Program. This included participation in their state-wide training programs for school lunch personnel, assistance to county supervisors on the use of visual aids, talks to regional and county organizations of school lunch workers and consultation to individual school lunch departments. The chief nutritionist and one of the state school lunch staff rewrote the nutrition course outline for training school lunch personnel. A pamphlet entitled "September Only Changes the Place" was prepared in conjunction with the state school lunch staff. This leaflet was designed for parents of children entering school.

Two agencies called on the division for assistance for the first time. These were the State Road Department and the Florida State Hospital. Several prison camps were inspected for the former, and recommendations were made for improving the nutritive value of the meals served. Assistance was also given in setting up a nutri-

tional accounting system for the camps. The Florida State Hospital has regularly requested a nutritionist to lecture on the nutritional need of neurological patients to each group of nursing students affiliating with the institution.

Three members of the staff participated in the school health conference at Florida State University and one in the conference at Florida A. & M. University. Several of the conferences for school health coordinators have been attended. With the emphasis placed on school health during the year, many calls were received from school health councils for talks and for assistance in program planning. Conferences with school faculties and individual teachers on the improvement of nutrition instruction in the classroom continued to take a good portion of the nutritionists' time.

Assistance was given to several voluntary agencies during the year. The three receiving the most were Visiting Nurses Associations, Red Cross and The Florida Heart Association. One staff member has assisted in planning and presenting low sodium classes for cardiacs in St. Petersburg; another has done the same in West Palm Beach; and a third has assisted in planning a series to be held in Jacksonville early in 1957.

Another first for 1956 was a request from an industry for an instructional program for its employees. It is hoped that this is an area which will offer more opportunities in the future.

A seven-day diet record study was done on 102 volunteer members of the central office of the State Board of Health. The study served as a basis of a talk given by one of the staff at the annual meeting of the Florida Health Officers' Society.

The bulletin, *Nutrition in a Nutshell*, has been continued on a bimonthly basis. It has a current circulation of 525. *Timely Topics* for diabetics has been prepared monthly by a member of the staff. (See report of Division of Chronic Diseases). From January through July, a monthly column was contributed to the bulletin, *Living in Later Years*.

A consumer leaflet, *More Food for Less Money*, was published. A series of visual aids for nurses was prepared and should be ready for distribution early in 1957.

Eight weeks field-work experiences were provided for a graduate student in public health nutrition from the University of North Carolina. . . . A staff member was elected president of the Florida Dietetics Association.

BUREAU OF SANITARY ENGINEERING

DAVID B. LEE, M.S., Eng.,
Director

Summary

A basic yardstick for the growth of the state and the relation of public health utilities thereto is clearly seen in the continued rapid rate of development of public or central water supplies in Florida during 1956. Approximately 350 water utility projects were approved with the dollar volume ranging well over \$27,000,000 which, when compared with the approximately 18½ million dollars estimated cost of these projects in 1955, shows the increase in this work. Significant also is the continued necessity of constructing and operating water utilities in areas outside of municipal corporate limits. Of the total number of water supply projects approved, slightly over 200 were for new systems and additions for serving realty subdivisions. This represents 57 per cent of the entire number approved compared with 53 per cent approved for this purpose in the previous year.

The waterworks for which plans were approved during the year represent an increase in water plant capacity in the state of nearly 114 million gallons per day and the comparative figure for 1955 was about 56 mgd. Of much concern to the department is the total number of existing water plants and systems in the state which must be given sanitary supervision. In bringing the inventory of these facilities up to date in 1956 for the first time in several years, it is noted from the data herein that there are well over 450 of these systems which now serve approximately 3,000,000 estimated population which represents about 78 per cent of the estimated total population of Florida.

Another parallel activity, particularly relating to the tourism factor of the state's economy and pointing up the need for its sanitary safety, is the construction and placing in operation of swimming pools serving the public and the fact that most of these are being put in motels, motor courts, apartments, hotels, as well as recreation centers. It is seen from the tabulated statistics herein that there was almost a 20 per cent increase in number of engineering plans and specifications for these pools together with their independent water treatment, filtration and recirculation systems approved in comparison with the number of these projects in 1955. The total estimated cost is about \$4,000,000 and at the end of 1956 there were well over 900 of these pools serving the public in operation under permit from the State Board of Health.

There are other details of information in water sanitation, show-

ing the continued efforts of the bureau in the sanitary control of drinking and culinary water placed on aircraft, railway trains and vessels operating in the state and in interstate traffic and activities covering sanitation of bottled water establishments, natural bathing places and kindred matters. There is seen also that public water supply wells and the issuance of permits for same indicate the continued increase in development of the ground water resources of the state for purposes of central water supply for the rapid growing population.

Activities in the sewage and industrial waste programs were accelerated during 1956. One of the significant features of the work performed during the year was the assistance given the special commission charged by the Legislature in 1955 to study problems related to water resources and pollution control. Although a report of this commission was in preparation at the close of the year, recommendations were made that this legislative instrument be established permanently and be empowered to review the adequacy of the water pollution control program of the State Board of Health and related agencies that have jurisdiction in pollution control. As a result of this cooperative effort, it was found that there are 272 sewerage systems in the state serving 1,645,000 people or about 44 per cent of the total population. Of this number only 376,000 are still discharging raw or inadequately treated effluent into streams, lakes and underground waters of Florida.

In the ten-year period from 1947 to 1956, approximately 900 sewerage projects were handled. More than 500 of these were processed in the last two years. This is indicative of the fact that there are 250,000 new residents coming to the state each year who have settled mostly in urban areas and which has necessitated extension of existing systems and the construction of new plants in keeping with this steady growth. However, the demand for adequate sewage disposal systems is not satisfied and there must be continuous development of adequate sanitary facilities if the state is to keep abreast with the annual increase in population. During the year there were 259 sewerage projects submitted to the bureau for review with an estimated cost of \$30,218,271.

One of the factors which was responsible for a certain amount of acceleration toward the end of 1956 was the initiation of Public Law 660 which was passed by the new Congress making available grants to water pollution agencies for the development of suitable programs and providing grants to assist municipalities in the provision of appropriate sewage treatment facilities. \$910,000 was allocated for grants to Florida municipalities during the fiscal year 1956-57.

In keeping with the state's interest in radiological health, plans

were prepared to determine the extent of radioactive material in the water courses of Florida.

Responsibilities related to the provision of adequate facilities for the treatment of industrial waste were carried out in the review and approval of 66 separate projects at an estimated cost of \$224,375. This activity reflected a 37 per cent increase in the number of projects processed in the previous year. This shows clearly the impact of the state's industrial development.

Stream sanitation requires constant attention because of its significance in relation to safety of waters insofar as domestic, industrial and recreation uses are concerned. Regular pollution surveys must be conducted in order to assure that protection of the public's health in accordance with the statutory charge that has been given to the State Board of Health.

There was a general increase in activities related to environmental sanitation which is noted particularly in the areas of tourist and trailer camps, food processing, shellfish and crustacea programs. Although in certain phases there was some reduction in the number of plans assigned to the Environmental Sanitation Section for review and approval, there was increased emphasis placed on the perfecting of existing programs and the strengthening of relationships and services with county health departments and fields allied with sanitary engineering. Fringe area sanitation continues to be a major concern because of the rate of housing development demonstrates the state's growth. Its resultant problems have placed increased demand on the services of professional public health personnel. The need for the provision of higher type sewage collection and treatment facilities is reflected by the fact that only 5309 lots out of a total of 22,610 were deemed satisfactory for the installation of septic tanks and drainfields as a method of sewage disposal.

At the close of 1956, it was indicated that projected environmental sanitation activity should be fostered in the areas of food, subdivisions, labor camps and tourist and trailer parks.

PUBLIC WATER SUPPLY AND TREATMENT

JOHN B. MILLER, B.S., M.P.H.

General

There follows a presentation of statistical data in tabular form on activity of the water supply and treatment section for the calendar year 1956. The work included review and recommendations for approval of 481 engineering plans and specifications for the proposed construction of public water works and systems or for extension or expansion of existing systems and plants, and for proposed

construction of public swimming pools and their independent water filtration and recirculation facilities. Table 38 summarizes the projects, for public water works, in each county and in Table 39 is seen the listed numbers of public swimming pool projects for each county. (Of interest is the arrangement made whereby beginning with 1956 the sanitary engineer in each of the local health departments of five counties, Broward, Dade, Hillsborough, Palm Beach and Polk, approves pool plans and specifications. There were a total of 154 pool plans approved by these counties; and a sample of 20 per cent of this number given detailed check review by this section in the central office. This arrangement resulted in a 6.5 per cent reduction in over-all volume of plans and specifications handled by the section. In relation to this, the number of pool plans approved in 1956 in these five counties represent an increase of 9.7 per cent over the number approved in the previous year. On the other hand, the number of pool plans approved in 1956 for the remainder of the state represent an increase of 36 per cent over the number approved for like area in 1955. With continuation of this trend, the percentage reduction in volume of plans handled by the section as a result of the mentioned local-approval arrangement, will soon be offset).

Sanitary supervision of public water supplies in the state, a function of this section, requires more attention than that afforded by the number of personnel which have been made available for this purpose. The 48 new systems for which plans were approved in 1956 further aggravate this situation. Overall field data on the existing public water facilities were brought up to date during the year for the first time since 1948; this having been made possible through assignment by the USPHS of an engineer to the department to do this work including data on sewerage and sewage treatment facilities. The new data on water works show that as of spring of 1956 there are 461 water systems (each serving an estimated 100 population or more.) Further, the data show these systems serve estimated population of 2,951,000, or over 76 per cent of the estimated population of the state at that time; which does not include the citizens served by the many smaller central water systems.

During the year, the efficiency of the small staff of the section continued to be lessened by unsatisfactory working conditions resulting from crowded and poorly arranged quarters.

New and Proposed Construction

As a consequence of the population increase and very rapid growth of the state, the planning for and construction of water utilities continued at a rapid rate in 1956. Table 38 shows a total of 349 projects for which the engineering plans were approved by the department. Even at the high level of this activity (in 1955, 312 projects ap-

proved), an increase of 11.9 per cent is noted for 1956. Likewise, the estimated cost total for these projects of \$27,325,003 in 1956 represents an increase of 47.7 per cent in dollar volume over the previous year.

Of the total number of projects for which plans and specifications were approved during the year, 41.3 per cent were for towns, cities, commissions and utility firms serving other municipalities. This figure is even lower than for 1955 (44.9 per cent). While on the other hand, there were a total of 202 projects approved for new systems and additions and extensions for serving realty subdivisions outside of municipal corporate limits, representing 57 per cent of the entire number approved in the state. This, of course represents a slight gain over the previous year (53.4 per cent).

Included in the plans approved by the bureau during the year were those for 48 new water systems. These, together with 45 projects for which plans were approved for additions to existing facilities, represent increase in water plant capacity in the state of 113.853 mgd (million gallons per day). The estimated cost of this proposed work is \$13,017,597. Definite increase is noted in comparison with the 26 plans for new plants and additions totaling 56.365 mgd capacity and estimated cost of \$6,241,785 which were approved the previous year.

A third and minor group of new water plants and additions to existing plants were covered under plans approved during the year including those of the Florida Turnpike Authority at its service areas in Broward, Palm Beach and Saint Lucie Counties and for State Prison at Raiford, the State Hospital at Chattahoochee and for the Stephen Foster Memorial. These represent 1.7 per cent of the total number of projects for which plans were approved; they have 4,893 mgd capacity and estimated cost total of \$534,000.

Among the many new plants or major additions completed and placed into service were those at Port Charlotte (Charlotte County), North Palm Beach, Eatonville, Orlando (Primrose Avenue), South Florida State Mental Hospital, Broadview Park Subdivision, Mascotte, Titusville, Salhaven (Palm Beach County), Pinellas County Water System and Myrtle Grove. Seven more water treatment plants nearing completion are to be placed in service early in the coming year.

Fluoridation of Water

During the year fluoridation of the public water supplies was duly approved and inaugurated at Belle Glade (February) Orlando and Ocala (November). Fluoridation of water supplies was also continued at Clewiston, Naples and Gainesville, and at the Miami system (also serving adjacent municipalities including Miami Beach, Surfside, Coral Gables, Bal Harbour, etc.).

Operation of Water Works

Some reference has already been made herein to the sanitary control or supervision of public water supply facilities. Excerpts from the data obtained through the project to inventory the public water works of the state during the year, show the following:

Type of Treatment for Majority of Water Distributed to System	Number of Systems	Estimated Population Served	Per cent of Total
None	138	157,000	5.33
Chlorination	121	355,000	12.03
Aerate and chlorinate	103	639,000	21.62
Other treatment without chlorine (Aeration, Stabilization, etc.)	21	58,000	1.96
Zeolite softening	10	105,000	3.56
Filter Plants	68	1,637,000	55.50
Totals	461	2,951,000	100.00

The population served by public water systems constitutes over 76 per cent of the estimated total state population (July 1, 1956) of 3,875,700. These 2,951,000 people on an average use a total of approximately 390 million gallons per day or, based on these figures, 132 gallons per capita per day.

It is seen that only a relatively small number (5.33 per cent of estimated population served) consume water distributed from simple pumping plants without chlorination. There are, however, 138 of these smaller systems (30 per cent of the total number); and they should be under close sanitary control, particularly as to bacteriological aspects. Also, the remaining number of water works tabulated with varied scope of treatment facilities obviously represent a large volume of work which should be accomplished, if the bureau's responsibility for sanitary supervision of public water works is to be fulfilled. Practically the total effort of the health department in this direction during the year continued to be that of part-time of one man from the central office together with some activity of regional sanitary engineers and the six county engineers.

Pursuant to the need for better sanitary control of water plant operation 59 plants that had not been submitting operation reports were visited by engineers of the section during the latter part of the year. Reports are being received from 31 of these plants as of the year's end.

In-service training of water works operators continues to be an important factor in betterment of operation; and this activity for the year is reviewed more fully elsewhere.

Public Swimming Pools

There is shown among other data in Table 39 an entry of 286 pool projects for which plans and specifications were approved during the year. These are for the entire state and include 154 projects approved by the sanitary engineers in the five counties of Broward, Dade, Hillsborough, Palm Beach and Polk. The total number of these public swimming pool projects represents a 19.7 per cent increase over the number approved in the previous year. The estimated cost total of \$3,944,387, however, is slightly under (03.4 per cent less) the total for 1955, indicating the continued trend to construction of the smaller pools as attractions at motels, motor courts, apartment developments and similar places. In 1955 the estimated construction cost of pools for which the plans were approved was about \$17,100; and in 1956 the comparative figure is down to \$13,790.

Geographical distribution of swimming pool construction in the state is also seen in Table 39 where entries are made of numbers of these projects approved. Although a majority of the number approved still are in the three-county area of Dade, Broward and Palm Beach, this majority is steadily declining. There were more projects (159 in 1956 and 144 in 1955) approved during the year for the three counties, but these represent only 55.7 per cent of the total number, whereas in 1955 the percentage for the three-county area was about 66 per cent of the total number of pool projects approved.

Operations permits were issued to 199 new pools in 1956 which added to those remaining valid, comprise 928 total number of pools under permit at the year's end. The number of new permits for pools this year represents an increase of a little more than 25 per cent over the number issued in 1955; about the same rate of increase as for the immediate preceding three years. Distribution of pool permits by counties is seen in Table 39.

Natural Bathing Places

Only one new permit was issued in connection with control of natural bathing places during the year. This was in Lake County. There were two permits voided in 1956, leaving valid 47 permits.

Public Water Supply Wells

The further development of the ground water resources of the state as sources of supply for water utilities is reflected in the total of 198 permits issued for well construction in 1956. This is over 8 per cent more than the number of well permits issued the previous year, and is not surprising in view of the state's rapid growth and the fact that most of Florida's public water supply continues to be taken from wells.

Bottled Drinking Water

No new or additional permits were issued for bottled water establishments, although a few inquiries about regulations were received from out of the state. Seven water bottling plants failed to renew their permits; and 19 permits were issued during the year, including four for out-of-state establishments. Among the data in Table 39 may be seen bottled water permit distribution by counties.

Field work incident to sanitary supervision of bottled drinking water plants continued as a function of personnel of the county health departments involved and of the bureau's regional sanitary engineers. Also, the policy to rely upon reports by the respective state health departments on the out-of-state bottlers, was continued.

Common Carrier Water Sanitation

The sanitary control of water supply and the facilities for placing drinking and culinary water aboard carriers in inter-state traffic was continued in 1956. This is accomplished through a cooperative agreement with the USPHS pursuant to its quarantine regulations and recommended drinking water standards. Inspection and contact work was performed by health department in the state, both local and regional, together with personnel of the Atlanta regional office of the PHS and the results and findings formed a basis of recommendations for approval or disapproval, as the case may be, to the Service for its appropriate certification. Some details of this activity are as follows:

Number of inspections made: Railroads 21, Vessels 39, Total 60;
Watering points added or deleted: *Added*, Railroad 0, Vessel 3;
Deleted, Railroad 1, Vessel 3.

Current status of watering points at end of 1956:

Carrier	Approved	Provisional	Prohibited	No Current Report
Railroad	16	5	0	10
Vessels	31	4	1	18

Reports on Water Supplies serving Common Carrier Watering Points were submitted to the PHS on 24 municipal systems and 4 privately owned systems.

The airline watering inspection program was turned over to the Environmental Sanitation Section early in the year to handle in conjunction with food service or catering sanitation pertaining to these carriers.

Educational and Professional Activities

In-service training of water plant and swimming pool operation personnel continued of prime importance to the sanitary supervision of operation of these facilities serving the public.

As regards water works, the 24th Annual Short School for Water and Sewage Operators held at the University of Florida for the week May 28-June 2, 1956, was of greatest significance in in-service training of operators of higher grade. As adopted in 1954, the policy on limiting the courses to Class A and Class B work was continued. This makes it possible to utilize resources of the annual short course for professional betterment and training of operation people who wish to advance. (Others are not neglected, since short courses for more elementary work are successfully being conducted in several regions over the state). Members of the section staff, together with representatives of other participating organizations, planned and presented course material. The Short School was held under the auspices of the General Extension Division of the University, the State Board of Health, and the Florida Water and Sewage Works Operators Association in cooperation with Florida Section AWWA and Florida SWIA.

Regional short schools were mentioned above, and these were held pursuant to Grade "C" work during the year at Daytona Beach (January), Pensacola (March), Tampa-St. Petersburg (October), Miami (November) and Jacksonville (December).

WATER WORKS OPERATORS SHORT SCHOOLS

Place or Area	• Attendance		Voluntary Examination and Certification	
			No. Taking Exam	No. Passing Exam
Tampa-St. Petersburg	109	(Grade "C" Water)	12	8
Jacksonville	61	" " "	12	9
Miami	160	(est.) " " "	30	11
Daytona Beach	56	" " "	14	7
Pensacola	70	" " "	4	2
Gainesville)	188	" "B" "	20	6
Gainesville)		" "A" "	4	3

• Combined water and sewage operators group.

Swimming pool operation requires more attention of the section than personnel which are available makes possible under current circumstances. Cooperation continued in 1956, however, with local health departments particularly in Dade County and to some extent in Broward County, in joining hands with Florida Swimming Pool Operators' Association in planning, developing and conducting in-service training for public pool operators. Conferences and correspondence have also ensued with officers of the association looking to improvement of the voluntary certification plan pertaining to pool operators. The Fourth Annual Short Course was held at Miami Beach in February 1956. Also, a small short course for pool operators was held by the local health department at Fort Lauderdale.

POOL OPERATORS SHORT COURSE

Classification	Miami Area		Ft. Lauderdale Area		Totals	
	Number Examined	Number Passing	Number Examined	Number Passing	Number Examined	Number Passing
Superior	13	11	1	1	14	12
Advanced	20	18	5	4	25	22
Satisfactory	64	46	24	18	88	64

Active participation of members of the section continued through committee work and holding office, in professional and technical associations, and in attending some of the conventions of same. A great many conferences and meetings were held with consulting engineers for cities, towns, utilities, etc., and with officials, concerning the design, construction and operation of water supply facilities serving the citizenry of the state.

TABLE 38

SUMMARY OF WATER SUPPLY PROJECTS APPROVED — 1956

COUNTIES	No. of Projects	Capacity Increase MGD	ESTIMATED COSTS		
			Distribution	Water Supply	Total
Alachua	1		\$ 135,007	\$ 7,000	\$ 7,000
Bay	3	2.085	135,007	500,450	635,457
Brevard	13	7.324	164,259	8,062,665	8,226,924
Broward	52	10.989	2,049,117	750,959	2,800,076
Charlotte	1		28,000	36,000	64,000
Collier	6	0.360	146,780	135,000	281,780
Columbia	1	1.000		6,000	6,000
Dade	59	9.736	3,436,490	1,293,503	4,729,993
Duval	38	1.295	398,317	155,850	554,167
Escambia	5		694,576		694,576
Franklin	1		6,000		6,000
Gadsden	1	2.500		305,000	305,000
Gilchrist	2	0.575	12,000	5,000	17,000
Glades	1		5,500		5,500
Hamilton	1	0.144		4,500	4,500
Highlands	1		58,000		58,000
Hillsborough	9	2.016	882,879	41,358	924,237
Lake	3	0.144	22,000	30,000	52,000
Lee	1	2.100		54,000	54,000
Leon	2	0.286	2,640	12,400	15,040
Manatee	7	0.575	94,618	10,000	104,618
Marion	6	3.594	570,019	54,348	624,367
Monroe	9		73,920		73,920
Okaloosa	2	0.647	135,000	15,000	150,000
Orange	20	55.426	709,683	653,462	1,363,145
Palm Beach	24	5.463	694,700	585,740	1,280,440
Pasco	4	0.214	98,900	6,400	105,300
Pinellas	38	0.216	2,715,452	162,521	2,877,973
Polk	2		219,800		219,800
Putnam	1	0.863		37,756	37,756
St. Johns	1		12,000		12,000
St. Lucie	1	0.565	6,000	65,000	71,000
Santa Rosa	2		18,500		18,500
Sarasota	8	0.250	146,205	73,000	219,205
Seminole	7	1.244	66,000	22,075	88,075
Union	1	1.000		5,000	5,000
Volusia	14	8.135	173,944	449,610	623,554
Walton	1		9,100		9,100
TOTALS	349		\$13,773,406	\$13,551,597	\$27,325,003

For a detailed listing of the projects in each county, which are summarized above, please write to the Bureau of Sanitary Engineering.

TABLE 39

PERMITS ISSUED FOR SWIMMING POOLS, NATURAL BATHING PLACES, BOTTLED WATER PLANTS, AND DRAINAGE WELLS; PLANS APPROVED FOR PROPOSED SWIMMING POOLS, BY COUNTIES, 1956.

COUNTY	PERMITS ISSUED					Plans Approved for Proposed Public Swimming Pools	
	Swimming Pools**	Natural Bathing Places**	Bottled Water Permits**	Swimming Pools	Drainage Wells	Number	Estimated Cost
STATE	928	47	19	199	355	286	\$3,944,387.00
Alachua	4	2	—	1	2	1	38,000.00
Bay	1	1	—	1	—	2	50,000.00
Bradford	—	—	—	—	—	1	7,500.00
Brevard	5	—	—	—	—	4	65,000.00
Broward	207	2	1	75	18	5	50,900.00
Broward	2	—	—	—	—	71(**)	648,338.00
Citrus	—	—	—	—	—	—	—
Clay	1	8	—	—	—	2	20,300.00
Collier	1	—	—	—	—	1	15,000.00
Columbia	3	—	—	—	—	1	14,000.00
Dade	424	2	3	56	303	6	45,700.00
Dade	—	—	—	—	—	48(**)	911,200.00
Duval	16	—	—	2	—	3	38,000.00
Escambia	—	1	—	—	—	1	12,500.00
Franklin	—	1	—	—	—	—	—
Hamilton	—	1	—	—	—	—	—
Hendry	1	—	—	—	—	1	10,000.00
Highlands	1	1	—	—	—	1	12,500.00
Hillsborough	6	4	—	2	11	1	9,700.00
Hillsborough	—	—	—	—	—	3(**)	17,800.00
Indian River	3	—	1	—	—	3	27,000.00
Jackson	2	—	—	—	—	—	—
Lake	7	1	—	—	1	—	—
Lee	9	—	1	3	—	1	12,600.00
Leon	4	3	—	—	—	2	20,000.00
Liberty	—	2	—	—	—	—	—
Madison	—	—	—	—	—	1	23,000.00
Manatee	—	1	—	—	—	—	—
Marion	17	2	—	9	1	5	40,150.00
Martin	3	—	—	1	—	—	—
Monroe	8	—	—	3	—	4	46,778.00
Nassau	2	—	—	2	—	—	—
Okaloosa	—	1	—	—	—	1	9,500.00
Orange	9	1	1	3	9	3	37,200.00
Palm Beach	50	1	4	5	4	2	115,000.00
Palm Beach	—	—	—	—	—	27(**)	380,508.00
Pasco	1	—	—	1	—	—	—
Pinellas	59	3	—	16	—	38	488,313.00
Polk	10	3	1	3	—	1	60,000.00
Polk	—	—	—	—	—	5(**)	105,500.00
Putnam	1	—	—	—	—	1	45,000.00
St. Johns	9	—	—	3	—	6	149,500.00
St. Lucie	9	—	—	4	—	—	—
Sarasota	18	1	2	8	3	16	214,100.00
Seminole	4	4	1	—	1	—	—
Suwannee	1	—	—	1	—	1	10,000.00
Taylor	1	—	—	—	—	4	41,000.00
Volusia	27	—	—	—	2	12	135,300.00
Wakulla	—	1	—	—	—	1	17,000.00
Washington	2	1	—	—	—	—	—
Out-of-State	—	—	4	—	—	—	—

** Accumulative or Continuous.

(**) Local County Approvals

SEWAGE AND INDUSTRIAL WASTES**JOHN W. WAKEFIELD, M.S. Eng.**

The State Board of Health is the water pollution control agency for the State of Florida. In this bureau is the sewage and industrial wastes section which deals with collection and treatment of liquid wastes. As such, it not only deals with strictly public health problems involving sewage and industrial wastes, but also with economic and esthetic problems. During 1956 the economic side of water pollution received considerable attention. The 1955 Legislature created a special commission to study water resources in Florida to determine if controlling legislation is necessary or desirable, and if so, to recommend the legislation which should be adopted.

The commission, composed of two representatives, two senators, and three citizens at large, chaired by Mr. Byron E. Herlong of Eustis, organized in the fall of 1955 and selected Dr. David B. Smith of the University of Florida, to serve as executive director. A number of advisory committees were organized on water pollution, water use and water quality. Personnel of this bureau served on all of these committees. After the advisory committees had reported and a series of public hearings had been held, the commission prepared preliminary recommendations and these in turn were submitted to the public in a series of meetings at various points throughout the state. These recommendations omitted reference to water pollution. Commission spokesmen explained that the advisory committee reports and their investigations had convinced them that the State Board of Health water pollution control program is adequate and no change in legal authority or organization was recommended.

The State Board of Health submitted a statement to the commission recommending that the public health aspects of water resource control be recognized and acknowledged as being of paramount importance. It was recommended further that the permanent commission, for which legislation is to be recommended, should be empowered to review the adequacy of the water pollution control program of the State Board of Health as well as the several other agencies having some authority over water pollution control and that the Water Resources Commission should serve as an agency to coordinate the efforts of all state agencies interested in water pollution.

The final report of the commission for submission to the legislature was in preparation at the year's end. No definite information was available as to the action of the Study Commission with regard to the above mentioned recommendations.

In order to provide factual data to the Water Resources Study Commission, as well as to accurately determine progress in water and sewage sanitation, a detailed statewide inventory was made of

public water and sewage facilities with the assistance of the USPHS. Preliminary figures compiled by Mr. Richard Schmid, Public Health Engineer, on loan to the State Board of Health from USPHS, accounted for 272 sewerage systems serving 1,645,000 people or about 44 per cent of the total population. Of these, only 376,000 are still discharging raw or inadequately treated effluent into the streams, lakes and underground waters of Florida. The City of Jacksonville, which expects to embark on a major sewerage program this year, accounts for 216,000 of the inadequately served population. Since the completion of this inventory, sewer extensions to serve an estimated 30,246 people has been placed under construction and adequate treatment plants have been started or completed to serve about 160,000 of the remaining 190,000 listed as needing new sewage treatment plants.

The growth of sewerage systems in Florida is shown graphically in Figures 6 through 8 accompanying this report. Since most of the 250,000 new residents of the state each year will reside in the urban areas, it is necessary to increase the sewered population by this amount each year, to keep abreast of the influx. It is encouraging to note that the per cent of the total population served by sewers increases each year and it is especially significant that the design capacity of sewerage treatment plants now far exceeds the connected population and is approaching the magnitude of the total population. This reflects the fact that new sewage treatment plants are normally designed to be adequate for the estimated population to be served 15 or 20 years after plant is constructed. If the present pace continues, the bulk of the unsatisfactory sewerage conditions prevailing in Florida should be eliminated in five to ten years.

Figure 8 shows the price the state is paying for adequate sewerage and the growth of the work load of this section. In the last 10 years the citizens of Florida have paid or obligated to pay more than \$172,800,000 for sewers and sewage treatment. This section handled some 900 projects during that period and more than 500 of these were reviewed in the last two years. In addition, Figure 7 shows the ever increasing number of treatment plants requiring supervision. Including those approved in 1955, but placed under construction in 1956, 37 new treatment plants were added during 1956 representing an increase of 16 per cent over those requiring supervision in 1955.

The growth in sewerage facilities requires corresponding growth in the regulatory agency if adequate supervision is to be obtained. Partly due to a national shortage of sanitary engineers, chemists and biologists and partly due to a budget which has not kept pace with the work load, such an increase in personnel has not taken place. During most of 1956 only one engineer was available to review plans and specifications of public sewerage systems and to coordinate sewage treatment plant operator training. Two engineers were avail-

FIG. 6

PROGRESS OF SANITARY SEWERAGE
IN FLORIDA

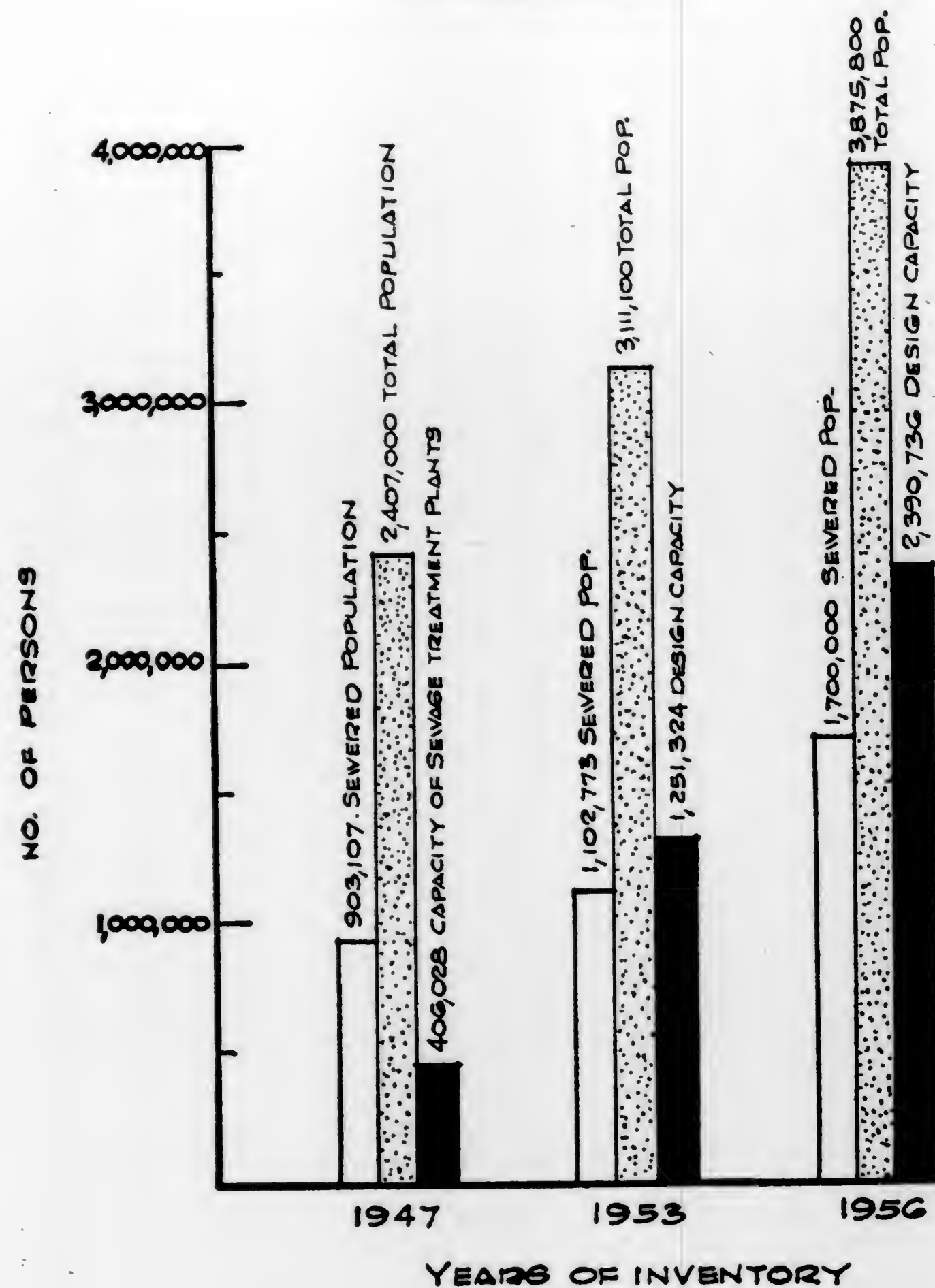
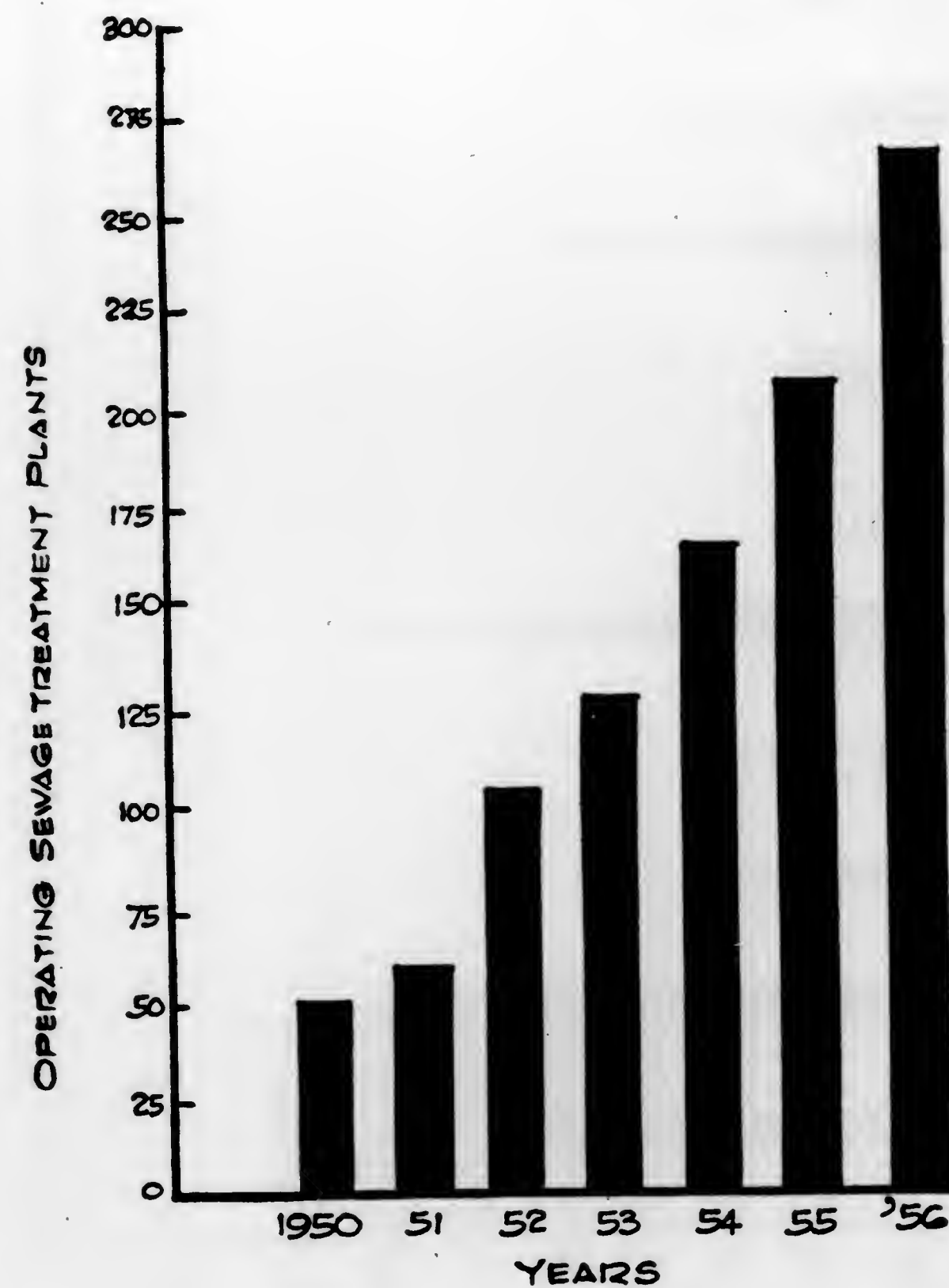


FIG. 7

OPERATING SEWAGE TREATMENT PLANTS
IN FLORIDA 1950 - 1956



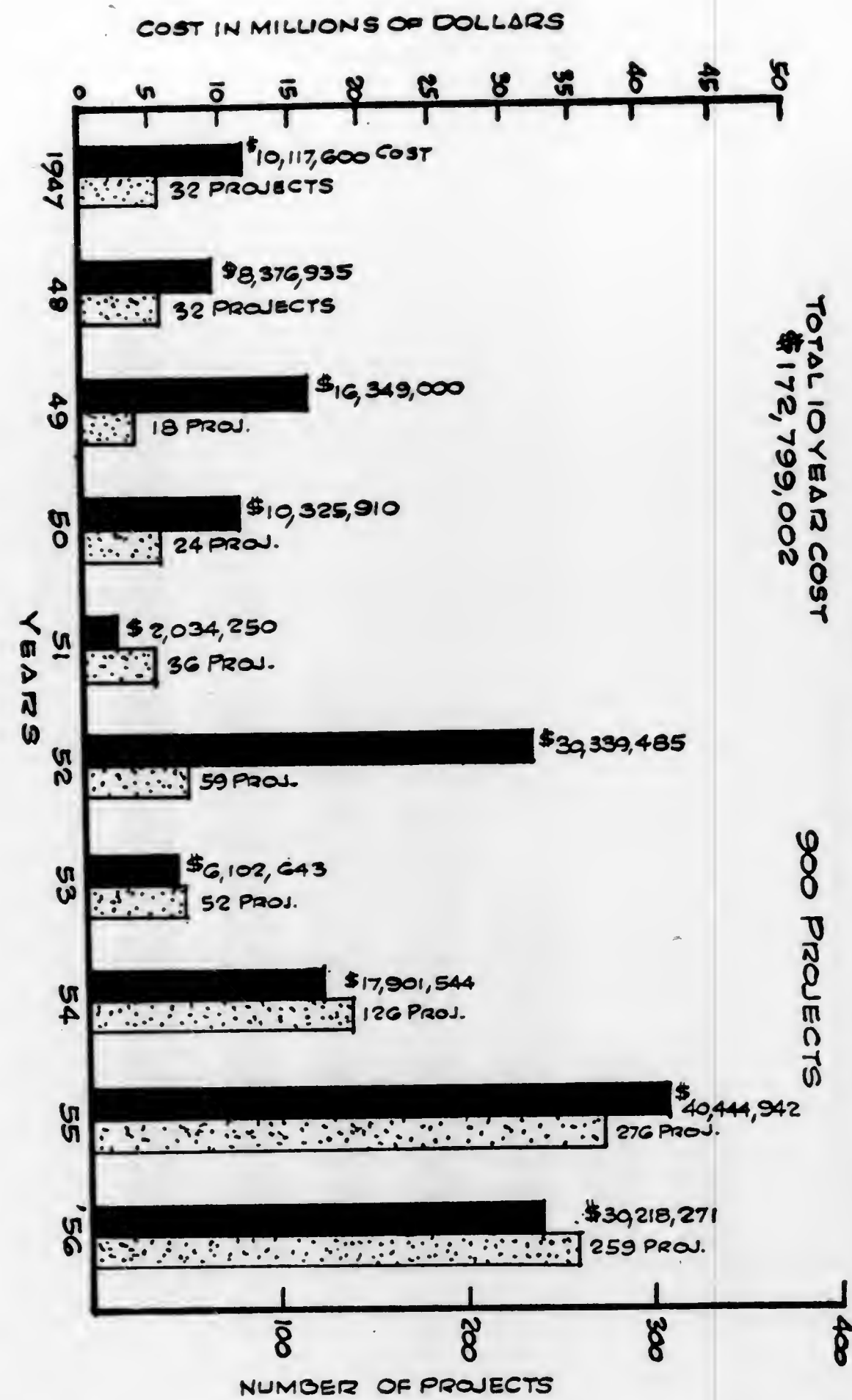
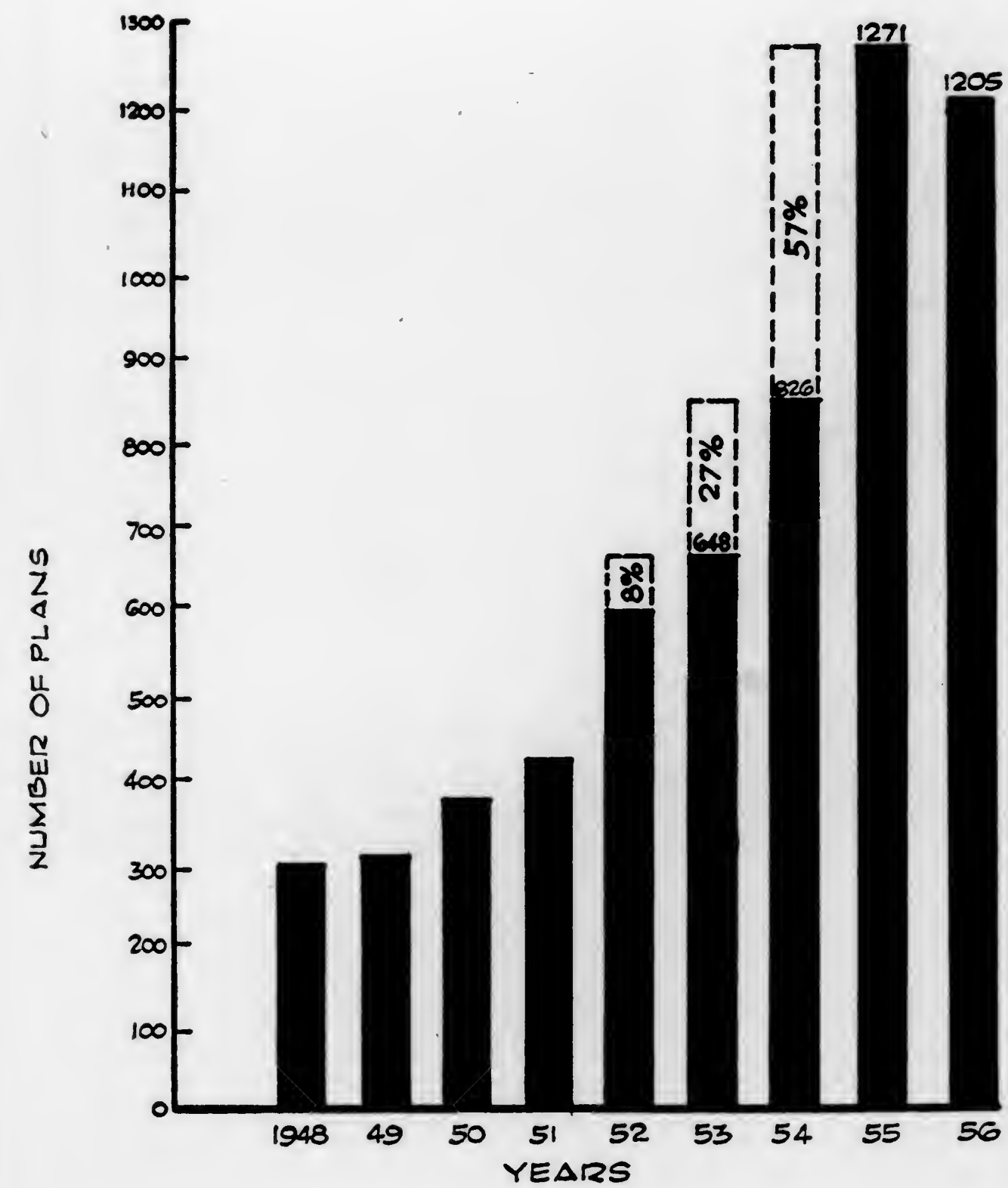


FIG. 8
NUMBER AND ESTIMATED COST OF SEWERAGE PROJECTS
1947-1956

FIG. 9
PLANS PROCESSED ANNUALLY
1948 - 1956



able for part of the year and a third was expected early in 1957. If these three engineers can be held long enough to become experienced, a reasonably adequate program should be possible. Their efforts should be supplemented, however, by additional chemists, biologists and stenographers if full advantage is to be taken of their specialized knowledge.

Table 40 is a consolidated list of the 259 sewerage projects that were submitted for review during 1956. It was estimated that these projects would cost \$31,137,386. Many of these projects were for extensions or additions to existing sewerage systems.

One factor which became active too late in 1956 to have much effect on this year's program may have considerable effect on that of 1957. Reference is made to the passage by Congress of Public Law 660 making available grants to water pollution agencies and, in a separate category, grants to municipalities to stimulate the construction of needed sewage treatment facilities. Under the first category the State Board of Health will use the grant to increase the field staff working on stream pollution studies to obtain mobile laboratory equipment and to equip a radiological laboratory suitable for the determination of radioactive material in water including "background" measurements.

Florida was allocated \$910,000 for direct grants to cities under the second category and at the year's end applications were being received in order that priorities could be recommended. Whether this program will stimulate or slow down construction of sewerage treatment facilities is a matter of conjecture. Judging by applications already received, it appears that some municipalities have become interested that probably would not be able to finance such a program without assistance.

Industrial Waste

There were 66 separate projects involving an estimated cost of \$224,375 approved during 1956. This represents an increase of 37 per cent in the number of projects and 22 per cent in total cost. These were relatively small waste treatment plants for laundry, bakery, and

TABLE 40
SUMMARY OF PUBLIC SEWERAGE PROJECTS
APPROVED IN 1956

County	DESIGN POPULATION	ESTIMATED COSTS			
		Sewers	Lift Stations	Plant	Total
ALACHUA		2,033	\$	\$	\$ 2,033
BAKER		2,500			2,500
BAY		129,645	40,000		169,645
BREVARD	15,820	512,850	92,225	194,400	799,475
BROWARD	17,062	1,091,658	243,000	642,500	1,977,158
CHARLOTTE	700	53,000	10,000	15,000	78,000
CITRUS				5,250	5,250
COLLIER	5,350	250,600	86,400	170,000	507,000
DADE	18,125	1,877,565	523,782	351,500	2,752,847
DUVAL	10,004	387,562	56,100	558,725	1,002,387*
ESCAMBIA	375	177,732	26,368	6,400	210,500
GADSDEN	3,140	155,400	25,000	112,600	293,000
HILLSBOROUGH	4,200	2,707,804	308,418	110,000	3,126,222
INDIAN RIVER		6,000	4,800		10,800*
JACKSON		24,100	10,600		34,700
LEE	600	824,278	155,780	18,000	998,058
LEVY	2,000	70,500	49,500	80,000	200,000
MANATEE	3,500	78,000		164,000	242,000
MARION	2,000	237,111	34,000	72,000	343,111
NASSAU		95,000	50,000		145,000
ORANGE	1,750	725,634	1,000,230	180,000	1,905,864
OSCEOLA		13,500			13,500
PALM BEACH	114,794	4,079,333	1,475,503	1,933,737	7,488,573*
PINELLAS	69,400	4,474,299	691,623	1,032,594	6,198,516
POLK	4,175	343,000	79,800	80,000	502,800
ST. LUCIE	50,000	1,108,000	350,000	312,000	1,770,000
SANTA ROSA		9,500			9,500
SARASOTA	1,225	75,456		45,000	120,456
SEMINOLE	1,000	67,179	25,000	50,500	142,679
UNION		2,000	2,500	4,500	9,000
VOLUSIA			54,500		54,500
TOTAL	325,220	\$19,581,239	\$ 5,395,129	\$ 6,138,706	\$31,137,386*

* Certain of the projects are shown only in the totals. Information was not available at time this summary was compiled as to whether the money was allocated to sewers, lift stations or plants.

For a detailed listing of the projects in each county, which are summarized above, please write to the Bureau of Sanitary Engineering.

TABLE 41

INDUSTRIAL WASTE PROJECTS APPROVED IN 1956

County and Nearest City	Project Description	Est. Cost
BREVARD COUNTY		
Merritt Island	Laundry Waste Treatment	\$ 3,500
BROWARD COUNTY		
Davie	Laundry Waste Treatment	3,000
Ft. Lauderdale	6 Laundry Waste Treatment Projects ..	20,000
Hallandale	3 Laundry Waste Treatment Projects ..	9,000
Hollywood	3 Laundry Waste Treatment Projects ..	9,000
Lighthouse Point	Laundry Waste Treatment	3,000
Pompano Beach	3 Laundry Waste Treatment Projects ..	9,000
DADE COUNTY		
Hialeah	4 Laundry Waste Treatment Projects ..	14,000
Miami	13 Laundry Waste Treatment Projects ..	41,900
Miami	Aluminum Processing Plant Wastes	14,215
Miami	Milk Bottling Plant Wastes	8,000
Miami Beach	2 Laundry Waste Treatment Projects ..	7,000
North Miami	Laundry Waste Treatment	3,000
North Miami Beach	Laundry Waste Treatment	3,000
Opa Locka	Aluminum Processing Plant Wastes	4,460
Perrine	Laundry Waste Treatment	3,000
South Miami	Laundry Waste Treatment	3,000
DUVAL COUNTY		
Jacksonville	Bakery Waste Treatment	3,500
Jacksonville	6 Laundry Waste Treatment Projects ..	14,500
Jacksonville	Meat Packing Waste Treatment	
Jacksonville	Restaurant Waste Treatment	2,200
Marietta	Laundry Waste Treatment	2,000
ORANGE COUNTY		
Orlando	Laundry Waste Treatment	3,000
PALM BEACH COUNTY		
Boynton Beach	Laundry Waste Treatment	3,000
West Palm Beach	3 Laundry Waste Treatment Projects ..	9,000
PINELLAS COUNTY		
Pinellas Park	Laundry Waste Treatment	2,000
St. Petersburg	Laundry Waste Treatment	3,000
SARASOTA COUNTY		
Longboat Key	Laundry Waste Treatment	5,000
Sarasota	2 Laundry Waste Treatment Projects ..	5,000
Venice	Laundry Waste Treatment	1,000
SUMTER COUNTY		
Center Hill	Meat Packing Wastes	9,800
VOLUSIA COUNTY		
DeBary	Laundry Waste Treatment	3,500
	TOTAL	\$224,175

restaurant wastes. As has been true in the past, this represents a small part of the volume of industrial wastes.

Among new plants in 1956 were a citrus concentrate plant at Ft. Pierce, a chemical plant in Santa Rosa County, a paper plant at Hollywood, a plant in Pinellas Park to manufacture equipment for the government, expansion of a chemical plant near Pensacola. Several of the pulp and paper mills have continued to expand production.

The problems caused in 1955 by the discharge of phosphate processing wastes into the Alafia and Peace River Basins lessened somewhat in 1956. However, this is a problem that will continue to a greater or lesser degree so long as this type of manufacturing operations is continued. High concentrations of fluorides can be toxic, or hinder normal development of man or livestock. Either excessive acidity or fluorides are harmful to fish and their food supply. A new triple superphosphate plant in the Alafia Basin is expected to begin operations in 1957. Automatic sampling equipment and supervisory personnel to make necessary tests are not available to the State Board of Health. Until both are available, it will be difficult to detect damage at an early date, or to fix responsibility for damage. Results of occasional samples obtained from both basins during the year indicated some reduction in fluoride content. The company, for whom a triple superphosphate plant at Brewster is being constructed, has set up automatic sampling equipment at three points to determine fluoride concentrations. A regular sampling program has been started well in advance of plant startup.

Stream Sanitation

The stream pollution field staff, already far too limited, was further reduced during much of 1956 by the absence of both the staff biologist and the sanitary chemist on educational leave for graduate study. Another chemist joined the staff at mid-year and efforts are being made under the stimulus of Public Law 660 to recruit another aquatic biologist and another chemist. In the meantime, stream surveys have been very fragmentary. There is a great need for intensive follow-up work to supplement the "Peace and Alafia River Stream Sanitation Studies, 1950-1953" as well as the many industries in adjoining stream basins. The growth of new industries, some of which have already been mentioned, in these basins intensifies an already acute problem. A full time stream sanitation staff consisting of several engineers, a chemist and a biologist located in the Central Florida Area is urgently needed if the water resources are to be adequately conserved and protected for all legitimate uses.

The Amelia River in Nassau County and the Fenholloway River in Taylor County, both exempt from State Board of Health supervision, by legislative act, continue to be grossly polluted with pulp and paper mill wastes. Conditions in Rice Creek have worsened with

some pollution of the St. Johns River by the pulp and paper mill wastes at the confluence of the two streams. Still more expansion of plant capacity points toward additional pollution of the St. Johns River unless aggressive waste treatment measures are instituted.

Another survey of Bayou Chico was made in 1956. Certain studies have been made by one of the companies and it is expected that the pollutional load on the bayou will be decreased during the coming year by treatment of a portion of the wastes going into it.

The staff available for supervision of industrial waste consists of one chemical engineer, one sanitary chemist and one sanitary biologist. They are based in Jacksonville. This staff must make all technical industrial waste studies, must make, or assist county personnel in all stream sanitation studies and review such plans as are submitted for approval.

The rapid industrialization of Florida means more trained technical people must be obtained to cover the entire state. A Central-South Florida stream sanitation laboratory and base of operations to shorten travel requirements to provide facilities for a large technical staff, together with necessary stenographic and clerical assistance, will greatly implement the needed work of the present industrial activity. Since all indications point towards ever-increasing industrialization, a corresponding increase of technical supervisory personnel will be required as industrial growth proceeds.

In addition to other duties, the industrial waste staff will be required to make background radiation studies of waters of the state. Action has been initiated to procure necessary equipment required for these studies. Studies of the background radiation level, prior to start-up of any activity which will produce radioactive wastes, is vital to control of such waste-producing sources. Since Florida is a relatively high cost energy area, it is highly probable that power reactors may be located in the state. A considerable amount of water is required for cooling atomic power plants and is contaminated to a greater or lesser degree of radioactivity. There are strong indications that some type of radioactive substances are concentrated by plants and animals. Since some of these plants and animals may be used, either directly or indirectly for human food, it is imperative that the public health be safeguarded as closely as possible.

That a polluted waterway can be recovered was dramatically illustrated by a follow-up survey in the Manatee River following completion of the Bradenton Sewerage Treatment Plant in 1955. The 1956 survey shows that areas considered grossly polluted in 1955 had a coliform content well below the level for recreational use. At one station where the 1955 coliform content was 130,000 per 100 ml, the 1956 report showed 38 per 100 ml. The Palmetto side of the river is still heavily polluted but there is a reasonably good chance that

a sewage treatment project can be instituted there also in the near future.

An ever increasing stream sanitation problem which requires very active investigation is the effect of nutrients from waste sources on the receiving stream. Partly due to a very unprecedented shortage of rainfall and also as a result of the rapid growth of Florida cities, all too frequently reports are being received of fish kills and nuisance conditions in streams and lakes caused by over-production of algae and aquatic vegetation. Recently the problem has become more acute because entomologists are associating the production of mosquitoes and midges (blind mosquitoes) with waters receiving treated sewage effluent. Whether this implied accusation is justified remains to be determined but it appears quite definite that steps must be taken to find ways to reduce the concentration of nutrient material in lakes and streams. A small beginning has been made toward the possibilities of research in these fields but a much more definitive approach is needed.

TABLE 42

Laboratory Analysis Stream Sanitation—Sewage and Industrial Wastes

	D.O.	B.O.D.	p H	Suspended & Total Solids	Fluoride Content	C. O. D.	Bact.	Biological Iden.	Chloride Content	Nitrate Content	Nitrite Content	Ammonia Content
Number of Samples.....	475	623	298	259	127	11	2514	3525	18	18	13	18

Drainage Wells and Sink Holes

Of the cities and industries formerly discharging untreated wastes into underground streams through drainage wells and sink holes only two cities, namely, Wildwood and Live Oak and a few industries, primarily in the Orlando and Miami area, still are using these dangerous devices. Wildwood has a sewage treatment project awaiting financing and Live Oak has retained a consulting engineer.

Permits for drainage wells are still issued to receive uncontaminated cooling water, surface water in connection with the control of lakes or chlorinated swimming pool drainage into fresh water aquifers. Permits are also issued for wells to receive drainage from private swimming pools and moderately polluted water where salt water aquifers can be reached. During 1956, permits were issued for 355 drainage wells of which 303 were in Dade County, 18 in Broward, 11 in Hillsborough and 9 in Orange. The rest were in seven other counties.

Educational and Organizational Activities

Personnel of this section participated in the planning and acted as instructors in five regional short schools and the annual short school at the University of Florida for water and sewage plant operators. The State Board of Health now has full responsibility for the examination and certification of operators and during 1956 there were 78 examinations given and the following certificates issued:

Class A Sewerage Treatment Plant Operator 2; Class B 9; Class C 37.

Two short courses were also given for industrial personnel involved with industrial wastes. These courses were given by the training division of the Robert A. Taft Sanitary Engineering Center of the USPHS at the invitation and with the active support and participation of the State Board of Health with 43 students enrolled in both courses.

The section chief was elected Florida's Director of the Federation of Sewage and Industrial Wastes Association and participated in the National Convention of the Federation.

ENVIRONMENTAL SANITATION SECTION

CHARLES E. COOK, C.E.

The activities of this section during 1956 were directed primarily toward rendering improved services to county health departments, industries and trades, other official and voluntary agencies. The trend throughout the year was an ever increasing work load, which placed additional demands on a limited staff. For this reason more attention was given to the strengthening of state and county relationships and the further coordination of the section's services with those of county health departments. The following report depicts to some degree the extent of the activities of the Environmental Sanitation Section.

Fringe Area Development (Subdivision Sanitation)

The rate of housing development in the fringe areas of Florida communities continued to demonstrate the steady growth of its population in 1956. Although the review of 375 subdivision projects shows a decrease of 24 per cent from the previous year, it is indicative that there was an increase of 12 per cent in the number of lots processed. Forty counties accounted for the 22,610 lots analyzed for their suitability in regard to sewage disposal and water supply. A total of 5309 lots were determined as satisfactory for the installa-

tion of septic tanks and drainfields as a method of sewage disposal. However, there was a sudden rise from 9 per cent to 62 per cent in the number of lots adjudged unsatisfactory because of their substandard soil characteristics, high water tables, and the topography of the land in which they are located. This is shown by the fact that there were 13,823 lots deemed unsuitable for subsurface disposal systems in 1956 as compared to 1080 in 1955. For 3501 cases (lots) it was recommended that proposed subdivisions be provided with central sewage collection and treatment plants due to area density and the likelihood that conventional septic tank installations would not give continuous adequate service. The basic approach utilized in the subdivision sanitation program is the promotion of sewage treatment plants and connection to municipal disposal systems wherever possible.

Of the 375 subdivision projects reviewed, 208 or 56 per cent, constituted new developments. The remaining 167 were concerned with additions to existing subdivisions. In 269 instances subdivisions are to be furnished water from approved municipal supplies and in 38 projects housing units are to be provided water from individual water supply wells. A number of cases included in the latter figure concerned only one to seven lots per tract. It is significant that there is a ratio of eight subdivisions to one that will be serviced by municipal water systems.

Through the mutual assistance program with federal insurance agencies, whereby recommendations are given on the suitability of proposed sanitary facilities for subdivisions for which mortgage insurance is desired, 6905 Federal Housing Administration and Veterans Administration Final Inspection Forms were processed. A breakdown shows that 1210 were Federal Housing Administration forms for individual sewage disposal systems and 4453 Veterans Administration forms for similar installations. The majority of the Federal Housing Administration forms concerned developments in Dade County, whereas the Veterans Administration forms related to single unit dwellings in proposed subdivisions in various counties of the state. Six of the total federal inspection reports were processed as unsatisfactory and in 890 cases encouragement was given for the connection of housing developments to central sewage treatment plants.

Subdivisions received through the Federal Housing Administration stood at 115 at the close of the year. Those processed through the Veterans Administration numbered 50 and those submitted on State Board of Health Form SAN. 432 accounted for 114. There were 73 requests for preliminary land surveys for proposed subdivisions and 35 for surveys on proposed additions to existing subdivisions, which involved considerable technical assistance to builders and county health departments.

In 1956 an estimated sixty field trips, exclusive of travel conducted in survey work, were made to counties in order to coordinate central office policies and procedures with county health department activities and the interests of local government representatives and land developers. A new subdivision analysis form was prepared and is to be distributed to parties and agencies concerned with this subject. The improved document requires much more detailed data than in the past and as a consequence the information that will be submitted on each proposed subdivision will make possible a more exact evaluation of the project in keeping with progressive public health principles and practice. It also will enable cases to be processed more quickly and foster a more standardized subdivision sanitation program.

Continuous interviews and conferences were held with representatives of federal insuring agencies, government officials, developers, realtors, contractors and county health department personnel in order to expedite cases and engineer adequate sanitary facilities for proposed subdivisions. Agreements were reached in several instances which resulted in modern and permanent type facilities being provided for housing developments.

A list of memoranda related to program policy and procedure was prepared for distribution. A subdivision analysis notebook was prepared for immediate reference and work has begun on the development of proposed regulations for subdivision control.

Although there was a percentage decrease in certain phases of this program in 1956, there was accelerated liaison activity in working with individuals and groups concerned with the problem of providing housing in a suitable environment for the people of Florida.

TABLE 43

SUBDIVISIONS REVIEWED ACCORDING TO THE NUMBER OF CASES PER COUNTY; THE NUMBER OF LOTS PER CASE; AND THE DISPOSITION OF CASES PER COUNTY, 1956

COUNTY	No. - Subdivisions	No. - Lots	No. - Lots Satisfactory	No. - Lots Recommended Sewers	No. - Lots Unsatisfactory	No. - Subdivision Individual Wells	No. - Subdivision Municipal Water	New Subdivisions	Extension to Existing Subdivisions
Alachua	10	450	338	101	11	4	6	8	2
Bay	1	24	24				1		
Brevard	18	842	374	311	157	4	12	12	6
Broward	10	417	20	256	164		10	4	2
Clay	1	6		2	4	1			1
Collier	2	193			193			2	
Columbia	2	94	73		21	1	1	2	
Dade	37	2370	1572	740	58	7	30	18	18
Duval	45	2387	249	231	1907	4	16	22	23
Escambia	22	638	158	480			22	6	16
Flagler	1	30			30				
Gadsden	2	195	13		182		1	2	1
Gulf	1	438		30	408		1		1
Highlands	3	367	5		362		1	2	1
Hillsborough	63	1104	647	275	182	6	50	36	26
Indian River	2	152			152				
Jackson	1	1	1						1
Lake	3	33	33				3		3
Lee	2	589			589			2	
Leon	5	215	100	88	27		4	2	3
Levy	1	10		10			1	1	
Liberty	1	106	106				1	1	
Manatee	2	2	1		1		1	1	1
Marion	5	210	83	20	107		5	2	3
Martin	1	49	49				1	1	
Monroe	3	83	3		80		1	1	2
Nassau	3	4	4				2	1	1
Okaloosa	17	346	222	70	54	5	11	5	12
Orange	15	903	233	220	450		14	8	7
Palm Beach	31	1521	148	197	1176	1	27	22	9
Pinellas	30	954	44	150	760	1	20	13	17
Polk	12	6836	210	126	6500		11	8	4
Putnam	2	197	12	185			2	1	1
St. Johns	1	9		9			1	1	
Santa Rosa	4	211	178		33		3	3	1
Seminole	4	117	117				4	2	2
Suwannee	1	105			105			1	
Taylor	5	126	126			2	3	2	3
Volusia	5	206	96		110		3	4	1
Walton	1	70	70				1	1	
Totals	375	22610	5309	3501	13823	38	269	208	167

Note: Unlisted counties presented no subdivisions for review.

Shellfish and Crustacea Sanitation

The year 1956 saw a general improvement in shellfish and crustacea operations which resulted from the application of managerial techniques, processing methods, and the setting up of plant conditions above past accepted norms. The advancement that was made was due in part to the cognizance of these industries that high bacteriological counts on samples of products provide indexes of substandard operations and insanitary practices. In addition, directional memoranda and the development of improved production procedures guided operators in their processing of quality foods. There has been a significant upgrading of these two commercial enterprises, which is particularly noticeable in the crustacea group.

Florida's oyster production was concentrated in the Apalachicola area in 1956 as it has been for a number of years. Although shellfish plants were better equipped and operated in 1955 than in the past, the current year saw still greater advances made in that all shucking plants now use stainless steel shucking pails and have installed concrete shell disposal areas. The shellstock tag developed jointly by the State Board of Health and the State Department of Conservation is being attached properly to all shellstock bags prior to being sold by ethical operators. However, bootlegging of oyster shellstock continues to be a vexing problem in a few counties. Efforts will be made in 1957 to obtain improved control of this illegal traffic which is potentially deleterious to the health of the public inasmuch as shellstock may be gathered from polluted waters, transported by unapproved methods and shucked in open boats or uncertified establishments.

Scallop shucking plants came in for more scrutiny and supervision than in previous years. As a result, Florida became one of the few states in the union where increased emphasis was being placed on the control of this type of shellfish by health authorities. This activity evoked the interest of the State of New York in this aspect of the program due to the flow of Florida products in that section of the country. This raised the question of the interstate certification of scallop products, which are not covered at present by existing health interstate certification systems. A total of 11 new scallop plants were constructed in Bay, Escambia and Wakulla Counties. Approximately 4500 pounds of illegal scallops were confiscated in Bay County, which stimulated dealers to abide by sanitary regulations and gained added respect for the state's enforcement program. Assistance is being given in the development of layouts and designs for three additional scallop plants which will be constructed in 1957.

Efficient cooperation was developed with the Food and Drug Administration in regard to the watering of oysters being shipped into Florida. This practice was discovered in the western part of the

state and various tests were run to determine amounts in excess of allowable limits that were being added. This information was relayed to the federal agency with beneficial results accruing to prospective purchasers. Furthermore, assistance was given the implementation of the USPHS research project on oysters and oyster growing areas which is being conducted out of its laboratory center in Pensacola.

Five new oyster shucking plants were built at the behest of health authorities. Twelve additional oyster plants were encouraged to make major alterations. Four shellstock houses were renovated. All shucking plants were cleaned and repainted prior to certification for the current year. The estimated cost of these improvements for shellfish plants stood at \$25,000.00.

In August representatives of the bureau participated in a Washington Conference to review proposed revisions of the recommended shellfish ordinance and code promulgated by the USPHS. In September two members attended the Maryland State Shellfish Seminar, which considered problems and improved standards attendant to uniform official control of this industry.

The City of Apalachicola engaged a full-time employee to operate its sewage treatment plant in accordance with recommendations. This step will prevent the possible contamination of the Apalachicola Bay from this source and assure efficient maintenance and service.

Shellfish Production Certifications

County	Number	County	Number
Alachua	1	Lee	8
Bay	18	Levy	1
Citrus	2	Nassau	1
Dade	2	Okaloosa	1
Dixie	1	Pinellas	4
Duval	2	Sarasota	3
Escambia	2	Volusia	3
Franklin	11	Wakulla	9
Gulf	1	Walton	3

Total: 93

Significant strides were made by the crustacea processing industry during 1956. Because of the attention that was drawn to Florida products in the previous year by unfavorable laboratory reports received from the Maryland State Department of Health and the New York City Health Department, crabmeat producers became aware of an urgency to improve their operations and alter their processing procedures in order to meet modern bacteriological and sanitation standards.

In order to assist the industry with its problems and acquaint its members with health regulations and policies, educational meetings were held in March in Jacksonville and Apalachicola. Following these conferences, uniform practices for the processing of perishable crabmeat products were established. Among the progressive steps taken was the announcement to the industry that no crabmeat plant would be certified in the future until such time as it complies in full with State Sanitary Code requirements and has raw crabmeat cooked by an approved steam-pressure cooking method. Emphasis also was placed on requiring all products to be packed in solid bottom containers and refrigerated properly in transit to distribution points. Strict adherence to Pure Food and Drug Administration labeling laws was demanded as well as consistent compliance with Florida's code stipulations in regard to the proper identification of certification numbers on crabmeat containers.

A laboratory testing program was initiated in cooperation with the Bureau of Laboratories for the examination of samples of crabmeat products. The Apalachicola Marine Laboratory also participated in this program. As a result of this scientific approach, together with the application of advanced processing techniques in individual plants, higher quality crabmeat and sanitation standards were maintained in 1956 with the aid of the various county health departments concerned. The participation of county health departments was more pronounced and active due to the personnel on-the-job training that was given local sanitarians.

Two plants in the state are engaged in the heat treated (pasteurization) preservation of picked crabmeat. It has been recommended generally that a dry picking process be used in all plants in order to reduce moisture content and the possibility of contamination. Each certified plant made some improvements during the year. Six new plants were constructed. In the Apalachicola area, ten plants installed steam pressure cookers and major alterations were made in eleven establishments. It is estimated that more than \$150,000.00 was spent by operators on improvements at the end of the crabmeat season.

Although 1956 is marked as a year of progress for the crabmeat industry and definite gains in the accomplishment of public health purposes, drastic action had to be taken in certain cases. More than 15,000 pounds of frozen crab claws had to be placed "off sale" due to the fact that they were produced by an uncertified plant and had to be examined in regard to their safety for human consumption. In west Florida, 500 pounds of questionable crabmeat were kept out of the open market by a joint agreement with the Pure Food and Drug Administration. Three establishments were closed due to their failure to comply with health regulations.

Crabmeat Production Certifications

<i>County</i>	<i>Number</i>	<i>County</i>	<i>Number</i>
Brevard	4	Indian River	1
Charlotte	2	Lee	4
Citrus	1	Levy	1
Dade	1	Manatee	1
Duval	4	Martin	1
Escambia	1	Nassau	3
Franklin	15	Volusia	1
Hillsborough	1	Wakulla	3

Total: 44

The State Board of Health Marine Laboratory in Apalachicola conducted monthly pollution surveys of the waters of shellfish growing and gathering areas. This laboratory made routine bacteriological analyses of oyster and crabmeat products and provided a regular inspection service for all plants of the areas. A highlight of recognition of the value of this laboratory's service came in the expression of the Franklin County Board of County Commissioners. A sum of \$6000.00 of county funds has been contributed for the construction of a new marine laboratory for the State Board of Health. These monies will be joined with those obtained from the City of Apalachicola and Hill-Burton Act Funds for the construction of the proposed new health center in which the marine laboratory will be housed.

Sanitarians from Bay and Escambia Counties received special training in shellfish and crustacea sanitation in the Apalachicola area. This arrangement is anticipated to be extended in 1957 to include other counties.

A composite shellfish and crustacea certification application form was prepared, which simplifies procedures. Personnel of the bureau attended meetings at the National Fisheries Institute and Oyster Institute of America in Miami. Close liaison was maintained with the shellfish and crustacea industries, the State Board of Conservation, U. S. Public Health Service, U. S. Pure Food and Drug Administration and county health departments. In brief, 1956 was a better year for sanitation in these fields of endeavor.

TABLE 44**SUMMARY OF ACTIVITIES — SHELLFISH AND CRUSTACEA PLANTS**

Description	Operating Certificates Issued	State Visitations Made	New Plants Constructed	Plants Remodeled
Oyster Shucking and Packing.....	65	807	5	12
Oyster Shellstock Only.....	27	245	4	9
Clam Shucking.....	4	---	---	1
Scallop Shucking.....	30	202	11	---
Crabmeat Shucking.....	44	473	6	18
Repacker.....	6	---	---	---

RELATED SHELLFISH AND CRUSTACEA ACTIVITIES

Oyster growing area water samples bacteriologically tested	370
Oyster meat samples bacteriologically tested	160
Crabmeat samples bacteriologically tested	308
Plant water samples bacteriologically tested	137
Swab tests	---

Food Sanitation**Food Processing Plants**

There was a 74 per cent increase in the number of food processing plants that meet the minimum requirements of the State Sanitary Code. Thus the expanded interest and activity of county health departments resulted in 221 establishments being permitted as compared to 127 in 1955. The majority of plants operate in Dade, Hillsborough, Pinellas and Volusia counties. However, 14 counties accounted for the total permits issued in the state. More than 30 different types of food are processed by these plants, which call for the application of a variety of techniques by sanitation personnel in their supervisory and consultative work.

During the year a number of requests were received concerning code interpretations and the classification of food operations that may fall in the processing plant category. Because of the continued growth of the food industry in Florida, there is need for further clarification of the types of establishments that should be included in the permit program. In June an educational meeting on food processing plant sanitation was conducted by the Gulf Coast Conference in Tampa. State Board of Health sanitation consultants joined State Department of Agriculture and county health department represen-

tatives in a consideration of solutions to problems connected with these food operations and the development of a coordinated program of official agency service. It was agreed generally that similar educational conferences should be held on a regional basis in 1957 in order that food processing plant sanitation responsibilities may be pursued more effectively.

The sanitation status and production data of Florida food processing plants were certified routinely to out-of-state health authorities upon request.

FOOD PROCESSING PERMITS ISSUED 1956

County	Number	County	Number
Dade	78	Okeechobee	1
Duval	1	Palm Beach	5
Hillsborough	20	Pinellas	64
Jackson	1	Polk	7
Lake	1	St. Lucie	4
Manatee	6	Sarasota	7
Monroe	1	Volusia	24

Total: 221

Commercial and Industrial Establishments

Food service operations continued to demonstrate the steady growth of Florida's population and economic life as is evidenced by the approximate 10 per cent increase in the number of establishments licensed by the State Hotel and Restaurant Commission in 1956.

Major activities were devoted to consultation service to county health departments, code interpretations, sanitary review of equipment design and the expediting of complaints relating to food service operations and practices. Due to the fact that many health departments are already taxed with the detailed demands of other programs, food service sanitation did not receive as much merited attention in some areas of the state in keeping with the potential health hazards involved in these operations and their importance to Florida's economy. The general consensus in the various counties is, however, that food sanitation programs need to be improved and that improvement will come with the relief of personnel shortages existing in understaffed health departments.

At the request of the USPHS a survey was made of the municipalities in the state that have adopted its recommended Ordinance and Code Regulating Eating and Drinking Establishments. The following communities have patterned their food service regulations on the stipulations of the federal document:

Avon Park, Daytona Beach, Jacksonville, Miami, Monticello, Pensacola, Sebastian, Sebring, Tallahassee, Tampa.

Sixty-six Florida county health departments enforce Chapter IX of the State Sanitary Code which also is based on the standard requirements suggested by the U. S. Public Health Service.

Plans and specifications on new construction and alterations of food service establishments were processed routinely as received. In this connection regular conferences were held with builders, architects, engineers and owners. A constant stream of correspondence was handled during the year, which related to general food service, mobile food service operations, itinerant restaurants, and the dispensing of food at fairs and carnivals. A multitude of inquiries were received from Florida citizens and interested parties out of state seeking official food service advice and comment on their prospective food service ventures.

School Lunch Department

School lunch room sanitation always has been an important adjunct of the food program. The services that were rendered related to the review and approval of functional layouts and designs for school food service facilities and sanitary features related to their water supply and waste disposal. This work has been included in the examination of the plans for renovations and additions to existing schools as well as for the construction of new schools which have been submitted. The disposition of these cases is reflected below in the school sanitation item of this report. Further, consultation service and assistance have been rendered the State Department of Education and County Boards of Public Instruction in their interest in providing suitable lunch rooms and cafeterias in schools throughout the state. Aid also has been given county health departments in conducting surveys of school lunch departments and developing sanitation programs for the supervision of school food service facilities.

Common Carrier Caterers Certification

There were twenty-four commissaries and catering points certified to the USPHS as approved for service to interstate common carriers. Based on the number of establishments supervised for the federal agency by county health departments, in cooperation with the State Board of Health, there has been a 27 per cent increase in the amount of work devoted to this program. In the middle of the year airline watering points were transferred from the Public Water Supply and Treatment Section inasmuch as water that is placed on airborne common carriers is serviced at catering points, which are the Environmental Sanitation Section's responsibility.

Closer liaison activity with representatives of the USPHS, county health departments and the Jacksonville City Health Department resulted in a better coordinated program in 1956. In the Miami area one commissary was not approved for service and one catering point ceased to place food and beverages aboard airlines. Catering points in Palm Beach County were transferred to other airports in the state. A testing program to determine the safe handling of airline drinking water has been developed, which is expected to be utilized effectively in 1957. Periodic informative materials were distributed to county health departments to assist them in their participation in the common carrier program. Among them was a list of "Acceptable Interstate Carrier Equipment Having Sanitation Significance", prepared by the USPHS.

Common carrier caterers certified in 1956 were: Broward 1, Dade 14, Duval 4, Escambia 1, Hillsborough 2, Leon 2, Total 24.

Food-Borne Disease Investigations and Food Condemnations

Assistance was rendered in six investigations related to food-borne disease outbreaks involving large quantities of foods. This activity was pursued in cooperation with other State Board of Health bureaus, county and city health departments, and allied official agencies.

Food Handlers' Training Program

Consultation service was provided health departments in the organization and presentation of the food handler training programs.

Dade County certified 3003 operators and employees as a result of seventy courses. The City of Jacksonville concluded its year's activity with 937 certifications. A special program was developed by the Holmes County Health Department for school lunch workers. In Alachua County a course for management was attended by thirty food service supervisors and 350 persons participated in an in-service curriculum presented for other personnel classifications. Assistance also was given the U. S. Navy in its food service educational interests at its Mayport installation.

The reasons for the curtailment of food handler's training programs continues to be lack of funds, personnel, the work loads of county health departments and their inability to devote sufficient time to develop and conduct effective programs of this type.

Tourist and Trailer Park Sanitation

There was a 312 per cent increase in the number of operation permits issued in 1956. This statistical rise was instigated through a memorandum issued early in the year, which initiated accelerated interest and activity on the part of county health departments. Their

cooperative assistance is credited as the major factor in this achievement. In the previous year 165 permits were executed as compared to 684 in the period covered by this report. These documents, which give evidence that establishments meet minimum State Sanitary Code standards, were prepared for new parks and extensions of existing tourist and trailer sites upon recommendations presented by county health departments. They also included the issue of permits for the transfer of ownership and changes in the designation of various operations. A total of 12,904 independent and 3496 dependent tourist and trailer park space accommodations are provided in establishments that received health departments sanction this year.

There was some reduction in the number of plans received for review and approval as compared to the previous year. These projects, as well as data supplied in permit applications received, concerned tourist and trailer park layouts and sanitary facilities related to sewage disposal, water supply, toilet fixtures and laundry waste. However, there was accelerated activity devoted to the development of improved supervision services throughout the state. A determined effort is being made to bring unpermitted tourist and trailer parks up to minimum health and sanitation standards, so that they may be accepted for legal operation. A long term arrangement has been made whereby more direct stimulation and assistance will be given county health departments to have as complete coverage as possible of this important aspect of Florida's hospitality trades. Some counties undertook surveys to determine the actual number of permitted and unpermitted parks operating within their boundaries and to obtain other pertinent data related to this subject.

In the course of the detailed work connected with this program, a revised placard of the Statutory Law and State Board of Health rules and regulations were prepared and distributed for display in individual establishments. New procedures and record systems also were developed.

TABLE 45
NUMBER OF SPACE ACCOMODATIONS PROVIDED IN PERMITTED
TOURIST AND TRAILER PARKS BY COUNTIES 1956

COUNTY	PERMITTED ESTABLISHMENTS	INDEPENDENT TRAILER SPACES	DEPENDENT TRAILER SPACES
ALACHUA	53	138	101
BAY	16	59	2
BREVARD	19	608	232
BROWARD	22	494	155
CALHOUN	1	10	---
CHARLOTTE	1	---	---
CLAY	1	35	---
COLLIER	6	93	6
DADE	11	1382	42
DUVAL	69	568	---
ESCAMBIA	81	554	121
GADSDEN	1	13	---
GULF	1	55	---
HAMILTON	6	---	---
HARDEE	1	---	---
HENDRY	1	10	30
HIGHLANDS	4	14	12
HILLSBOROUGH	48	573	175
INDIAN RIVER	2	5	12
JACKSON	1	4	---
LAKE	2	16	---
LEE	9	152	156
MANATEE	22	1310	1419
LEVY	2	7	13
MARION	1	---	---
MARTIN	7	225	10
MONROE	31	534	51
NASSAU	1	---	9
OKALOOSA	35	756	65
ORANGE	65	1999	34
OSCEOLA	1	14	4
PALM BEACH	6	93	27
PASCO	22	29	36
PINELLAS	26	1058	295
POLK	67	217	40
PUTNAM	1	14	---
ST. LUCIE	6	261	23
SANTA ROSA	8	---	---
SARASOTA	7	783	322
SEMINOLE	4	135	20
SUMTER	6	31	10
VOLUSIA	12	655	74
TOTALS	686	12,904	3496

Note: Independent Trailer—A trailer coach which has a toilet and a bathtub or shower.
Dependent Trailer—A trailer coach which does not have a toilet nor a bathtub or shower.

Camp Sanitation

The promotion of a healthy environment for recreational, educational and migratory labor camps has been a constant objective of the bureau. A total of 100 permits were issued for the operation of these establishments in conformity with minimum sanitation standards. Twelve camps in Hillsborough, Jackson, Manatee, St. Johns and Sumter Counties did not apply for certification renewal. Twenty-seven permits were issued for new operations in Dade, Highlands, Marion, Pasco, Polk, St. Lucie and Volusia Counties. The largest

number was in Dade County, which had an increase of nineteen camp permits over 1955.

The sanitation status of migratory labor camps continues to be one of major concern. Although general progress has been noted in the provision of adequate housing and sanitary facilities, and in the operation and supervision of these types of camps, there is a definite need for the development of improvement programs in each county in which these installations are located. Encouragement was given county health departments along these lines by the dissemination of "Suggested Standards for Agricultural Labor Camps," which was prepared by the President's Committee on Migratory Labor and distributed to official state health agencies by the U. S. Department of Labor.

Exploratory work was done on the preparation of sanitation educational material for the supervisors of various types of camps, their employees and their occupants. Certain aspects of this project are expected to be accomplished in the forthcoming year.

TABLE 46
Camp Permits Issued 1956

County	Number	County	Number
Dade	69	Marion	1
Hardee	1	Pasco	6
Highlands	1	Polk	9
Indian River	1	St. Lucie	2
Lake	4	Volusia	6

Total: 100

School Sanitation

An indication of the progress that is being made in the attempt to reduce the state's shortage of school facilities is evidenced by the submission of 102 sets of plans and specifications on school construction for review and approval. These projects covered complete new school units, classroom additions and designs for such auxiliary buildings as gymnasiums, auditoriums, school lunch departments, vocational agricultural structures, rest room, and science and home economic laboratories. The major portion of this work was related to the professional evaluation of proposed sewage disposal and other sanitation facilities. In general, higher type sewage treatment was provided for these educational institutions. Many of the reviews entailed considerable analysis, correspondence and conferences with architects, engineers and others concerned with the adequacy of these school plants.

Sanitation for the school environment is a permanent objective of county health departments. Cooperative sanitation programs are developed with local school boards and routine inspection services are provided in those counties that are able to have public health personnel devote regular time to this important activity. County health departments that are not in this position maintain working relationships with school authorities and render sanitation services according to their ability to do so along with the other duties of their general environmental health program. A few counties continue to foster sanitation through the medium of classroom instruction by county health department personnel. State-wide school sanitation guidance is given county education and public health officials by the liaison that is maintained between the State Department of Education and the State Board of Health.

School Plans Approved 1956

County	Number	County	Number
Bay	1	Lee	2
Charlotte	1	Manatee	6
Collier	4	Martin	1
Dade	32	Okaloosa	2
DeSoto	4	Palm Beach	12
Duval	10	Pasco	3
Escambia	2	Polk	3
Gulf	1	Putnam	1
Hardee	1	St. Lucie	1
Highlands	1	Santa Rosa	1
Hillborough	2	Sarasota	4
Indian River	3	Seminole	1
Jackson	2	Suwannee	1

Total: 102

Bedding Act Administration

The Bedding Act program realized an additional \$13,045.00 income over that which was reported in 1955. The factors believed responsible for this increase were wider acquaintance of members of the industry with Florida's statutory law and better adherence to regulations promulgated by the State Board of Health. Closer supervision by field personnel in five districts and the assignment of a clerk to the Environmental Sanitation Section also accounted for improved administrative procedures, the resultant registration of additional operators and the expanded distribution of bedding stamps.

Registrations

778 Manufacturers	@ \$25.00	\$19,450.00
321 Renovators	@ 10.00	3,210.00
2260 Retailers	@ 5.00	11,300.00
Registration Total		\$33,960.00

Stamp Distribution

3086 Books of 500 - 1c	@ \$ 5.00	\$15,430.00
2992 Books of 500 - 2c	@ 10.00	29,920.00
Stamp Total		\$45,350.00
Total		\$79,310.00

Refunds, Cancellations and Lost Stamps

1 Manufacturer Certificate refunded	@ \$25.00	\$25.00
2 Renovator Certificates cancelled	@ 10.00	20.00
2 Retailer Certificates cancelled	@ 5.00	10.00
1 Book 2c stamps to replace lost stamps	@ 10.00	10.00
Year's total		\$65.00
		\$79,245.00

Regular training conferences were held to familiarize staff members with special problems connected with the enforcement aspects of the program and coordinate field activities throughout the state. Emphasis was placed in these educational meetings on the utilization of tested approaches and the application of accepted inspection techniques. Special instruction was given in the composition and nomenclature of specific types of filling material, in the preparation of records and activity reports, and in procedures for the submission of bedding materials to the laboratory for analysis. Plans for 1957 include the assignment of a field supervisor and a full time laboratory technician.

TABLE 47
ACTIVITIES, BEDDING ACT ADMINISTRATION

Districts	Field Inspections				Items Found in Violation	Violations Corrected	Items Placed Off Sale	Items Banned From Sale	Laboratory Samples Submitted
	Manufacturers	Renovators	Retailers	Total					
Northeast	103	152	1661	1916	5658	1507	5	4146	13
Southeast	584	273	941	1798	628	411	178	39	107
Central	225	313	1827	2365	1115	1078	32	5	8
Southwest	301	220	2006	2527	4537	4477	60		17
Northwest	56	110	265	431	1051	874	76	101	4
Totals	1269	1068	6700	9037	12989	8347	351	4291	149

Miscellaneous Activities*Approval of Miscellaneous Projects*

In addition to the regular review of plans and specifications for construction in the foregoing areas of responsibility, fifty-six miscellaneous projects were submitted for study and approval. These designs covered a variety of architectural and engineering proposals for commercial buildings, dwellings, recreational facilities, and equipment and arrangements advanced for sewage disposal systems. In some of these cases a great amount of detailed professional examination was required, because of the novel nature of the creations that were presented.

Sanitary Nuisances

There was a reduction in the number of complaints received on alleged insanitary situations existing in different types of establishments and sections of the state. It might be assumed that there was a more general compliance with sanitary regulations and practices, or that more complaints are being directed to county health departments than heretofore. When a case is brought to the attention of the section, it is referred to local health authorities for investigation and solution. There was no occasion during the year which necessitated mediation over and above this procedure.

Sanitary Code Revisions

Suggested Sanitary Code revisions submitted for board approval during 1956 concerned amendments to the following: Chapter V, "Minimum Requirements for Sewerage Disposal in Unsewered Areas; Chapter VIII, "Plumbing;" and Chapter IX, "Restaurants and Eating Places." New regulations have been or are in the process of being developed for shellfish and crustacea operations, subdivision and tourist and trailer parks.

Nursing Home Program Participation

Continued assistance was given the Bureau of Special Health Services in the sanitary engineering aspects of its Nursing Home Program. The plans and specifications for fourteen projects were reviewed and approved. They included complete institutional units and additions to existing structures. The detailed features of this work involved the examination of functional layouts and designs, patient accommodations, food service facilities, water supply and sewage disposal. Four more projects were received in 1956 than were submitted in 1955.

DRAFTING**General**

1956 was a very busy year in most aspects of activity that are covered by this report. Routine duties involving drafting, processing of plans, maintenance of records and Ozalid reproduction work constitute the usual responsibilities assigned to the drafting room. But, in addition to these, there were special assignments throughout the year in connection with planning a proposed new State Board of Health central office building.

Late in 1956 additional personnel was assigned to the drafting room. This enabled considerable progress to be made on a backlog of clerical work of filing and record keeping. This improved the general usefulness of the bureau plan file due to more efficient maintenance, also enabled a greater concentration of time and effort to be given other phases of activity.

Special Activities and Assignments

Early in 1956, the bureau draftsman was given the assignment of preparing a comprehensive survey of floor space requirements for the State Board of Health central office. This was done in order to intelligently plan for a proposed new central office building. These data were developed for all bureaus, divisions and other special types of space needs.

When completed this survey provided the following information: An analysis of floor space requirements, a tabulation of comparative space, (requests versus recommendations) a summary of floor space requirements and a resume of the relationship of space and grouping of services and functions.

Assistance was also given in the arrangement and coordination of matters pertaining to the preparation of a complete site survey and subsoil analysis by engineering firms retained for this purpose.

With these and other data which became available during the year, preliminary studies and a basic scheme for a new administration building were developed.

Continued assistance and close cooperation were given the architect retained by the State Board of Health in all matters related to the preparation of contract documents for this project during the year.

General Drafting

Map and chart work to illustrate various surveys and reports pertaining to industrial waste and stream sanitation problems was an activity of considerable proportions in 1956.

Other drafting consisted chiefly of routine work involving charts and a number of typical drawings to be used for general distribution purposes.

Records and Files

In accordance with established procedure wherein file copies of all plans are microfilmed annually, a total of 11,464 film images were processed during the year. This film consisting of 20 rolls was appropriately filed and indexed.

During the year 1205 separate projects were processed in the drafting room. The above figure will not accurately reflect the total of all projects approved by the bureau since "Projects processed" will include a number of projects submitted and filed as information and others submitted which were approved at the county level.

Articles by staff members:

Lee, D. B. Sewage Disposal in Mass Building. Pub. Health Rep. 71:553-556, June, 1956.

Lee, D. B. Sewage Disposal in Mass Subdivision Building. Public Works Magazine, 87:112-14, August, 1956.

BUREAU OF NARCOTICS**FRANK S. CASTOR, Ph. G., Director**

The past year has been a busy one for this bureau. There was an increase in both arrests and convictions for violation of the narcotic law. This is probably due to a number of factors: increased mobility of population, influx of tourists and Florida's ever-increasing population. While arrests used to increase considerably during the winter months, now they are spread more evenly over the entire year since Florida is becoming a year-round vacation state.

The chief trouble spots continue to be Miami, Miami Beach and Tampa due to the popularity of these cities as winter resort places and the fact that race tracks are there.

During 1956, 2735 open inspections and 1071 investigations were made. All investigators of the bureau work very closely with local police and sheriffs' offices as well as with Federal narcotic agents and other Federal agencies.

Investigations made resulted in a total of 151 arrests during the year; 20 arrests more than last year. Of these arrests, 142 were for violation of the narcotic law, three for violation of the medical laws (practicing medicine without first obtaining a license to practice in Florida), and six for pharmacy violations. Defendants in these cases were sentenced by the courts to 187 years and 60 days and fined \$11,150.00. This was an increase of approximately 79 years in sentences and \$7,150.00 in fines over the previous year.

ADDICTS

The State Uniform Narcotic Drug Law provides for commitment and treatment of narcotic drug addicts as narcotic patients, both voluntarily and compulsory, at the hospital of the state prison.

Drug addiction is not only a serious problem for the unfortunate addict but is responsible for much criminal action. The bureau strives hard to carefully investigate and follow-through on all complaints. During the year 30 narcotic addicts were confined to State or Federal institutions for treatment. This is an increase of 11 addicts. Three addicts were declared insane.

While an addict can enter a private institution or the U. S. Public Health Service Hospital at Lexington, Kentucky, the hospital of the state prison is the only place in Florida where an addict is sent for treatment.

A very great need in Florida is the proper type of institution for treating drug addicts. This institution should provide some type of recreation facilities and entertainment as well as psychiatric treat-

ment; these would do much toward rehabilitating the addict so that he will not relapse immediately upon release.

While much has been written about teen-age addiction, investigation into complaints concerning teen-agers suspected of narcotic violations reveal no violations of any consequence.

Investigation further reveals that a large number of addicts in the state are comparative newcomers, having established residence during the last two or three years.

OTHER ACTIVITIES

A great deal of work at the central office of the bureau is concerned with the registration of every practitioner of the healing arts in the state: physicians, naturopaths, osteopaths, chiropractors, chiroprodists, registered physical therapists and masseurs. During the year, 7053 practitioners were registered.

All drug stores in the state are required to register annually. They are then sent a certificate of registration and each employed pharmacist is mailed a retail narcotic license. During 1956, 1208 drug stores were registered.

A very important part of the bureau's work is the inspection of drug stores, sundry stores, hospitals and other places of a similar nature. Prescription files, charts and records are checked for irregularities and violations of the pharmacy and narcotic laws. Checks are also made to determine that the compounding and dispensing of medicinal drugs is done only by qualified personnel.

Education as to the problem of drug addiction is considered essential by the staff. A total of 54 talks on the subject were made to approximately 4500 persons. Most of these talks were given to police training schools, physicians, pharmacists, nurses, PTA groups, schools, civic and church organizations. Response and interest to these addresses was excellent.

TABLE 48

TOTAL SUMMARY OF ACTIVITIES

Number open inspection	2735
Number investigations	1071
Number arrests	151
Number violations corrected where no legal action was taken	27
Aggregate sentences imposed by the courts	187 years, 60 days
Aggregate fines imposed by the courts	\$11,150.00
Defendants receiving probation, deferred, withheld or suspended sentences	44
Cases discharged or nolle prosequi by the courts	4
Cases placed on absentee docket	2
Number narcotic addicts confined to State or Federal institutions for treatment	30
Number persons acquitted by the courts	3
Number defendants declared insane	3
Number practitioners of the healing arts registered for 1956 (M.D., D.O., D.C., N.D., R.P.T., D.S.C.)	7053
Number drug stores registered for 1956-57	1208

TABLE 49

MEDICAL PRACTITIONERS REGISTERED WITH THE BUREAU OF
NARCOTICS BY PLACE OF RESIDENCE AS OF DECEMBER 31, 1956
(Excludes deceased practitioners)

COUNTY	TOTAL	MEDICAL DOCTORS	OSTEOPATHS	CHIROPRACTORS	NATUROPATHS	CHIROPODISTS	PHYSIOTHERAPISTS
TOTAL	6993	5560	481	512	229	148	63
ALACHUA	77	69	1	4	1	1	1
BAKER	1	1					
BAY	45	36	4	3		1	1
BRADFORD	9	7	1	1			
BREVARD	52	40	2	9		1	
BROWARD	306	226	37	27	8	4	4
CALHOUN	5	4		1			
CHARLOTTE	5	4			1		
CITRUS	7	7					
CLAY	12	12					
COLLIER	12	11	1				
COLUMBIA	13	12		1			
DADE	1415	1129	91	86	60	36	13
DeSOTO	11	8	1	1	1		
DIXIE	2	2					
DUVAL	461	399	15	24	12	7	4
ESCAMBIA	119	108	1	9		1	
FLAGLER	2	2					
FRANKLIN	5	4	1				
GADSDEN	24	22	2				
GILCHRIST	1	1					
GLADES	1	1					
GULF	4	4					
HAMILTON	5	5					
HARDEE	7	6		1			
HENDRY	7	5	1		1		
HERNANDO	14	14	1				
HIGHLANDS	17	14	1	2			
HILLSBOROUGH	347	267	13	30	27	7	3
HOLMES	4	3	1				
INDIAN RIVER	18	13	3	1	1		
JACKSON	16	12	2	2			
JEFFERSON	5	4					1
LAFAYETTE	2	2					
LAKE	48	31	4	10		2	1
LEE	45	36	3	3	2	1	
LEON	70	56	4	3	2	2	3
LEVY	3	3					
LIBERTY	0						
MADISON	10	8	1	1			
MANATEE	61	40	6	9	4	1	1
MARION	45	38	3	4			
MARTIN	10	9		1			
MONROE	25	19	1	3	2		
NASSAU	6	6					
OKALOOSA	18	16		2			
OKEECHOBEE	4	3		1			
ORANGE	277	216	20	25	9	4	3
OSCEOLA	10	6	2	2			
PALM BEACH	252	196	13	27	6	6	4
PASCO	24	13	6	4	1		
PINELLAS	442	306	43	37	29	17	10
POLK	171	139	7	17	3	4	1
PUTNAM	14	9	1	3	1		
ST. JOHNS	27	21	2	2	1	1	
ST. LUCIE	27	23	2	1		1	
SANTA ROSA	6	6					
SARASOTA	91	70	3	12	2	4	
SEMINOLE	31	27		3	1		
SUMTER	6	5	1				
SUWANNEE	6	6					
TAYLOR	7	5		1	1		
UNION	1	1					
VOLUSIA	145	99	22	11	3	6	4
WAKULLA	2	2		1			
WALTON	7	6					
WASHINGTON	4	4					
OUT OF STATE	2074	1689	158	127	50	41	9

BUREAU OF DENTAL HEALTH

FLOYD H. DeCAMP, D.D.S.,
Director

The program of this bureau for 1956, as in the past, especially emphasized preventive dental health measures, carrying dental health education into the classroom, to teachers-in-training, teachers-in-service, college and university students, professional and lay groups, and to the public at large, by all means available to it.

EDUCATION

All phases of the bureau's program promote dental health education, based on preventive measures. The effectiveness of the program is greatly strengthened by the services of a full-time dental health educator, who does preplanning for the corrective unit, dental X-ray programs, dental survey programs, and for fluoridation referendums as this coordinates the preventive and corrective programs. The bureau has been without the assistance of the dental health educator since September due to educational leave for post-graduate training in health education. Before leaving, her activities included visits to ten different counties, where preplanning meetings were held with school administrators, teachers, and public health personnel, and dentists prior to dental surveys, X-ray programs and visits of the mobile dental corrective unit. Thus the children were prepared for the programs and their participation was another learning experience for them, and teachers, parents, and the community as a whole were alerted to the great importance of preventive measures. Fluoridation was stressed as one of the most important measures in the control of dental decay, as well as being the least expensive. The teaching consists not only of dental orientation of teachers-in-service, parent-teacher associations and other civic groups, but in the distribution of dental health literature, presentation of films and filmstrips, as well as preparation of radio and television programs.

Special dental health educational classes were held at the University of Florida, Florida State University, A. and M. University, University of Miami, Tampa University and Florida Southern College. By special invitation, there was participation by the dental health educator in summer courses and schools for 4-H Club boys and girls and Scout groups.

Approximately 150 teacher packets and 36,077 separate pieces of dental health literature were distributed by this bureau.

Methods and techniques used in conducting the Orlando fluoridation referendum in 1955 were compiled into booklet form for distribution to other communities planning such action. This booklet has been well received throughout the state and has received favor-

able comment from other health agencies and organizations outside of Florida who have requested permission to reproduce it.

In order that the dentists in the state would be better informed of the services available to them through the State Board of Health, a booklet entitled "Aids for the Private Dentist" was prepared and mailed to all registered Florida dentists. Distribution of the booklet stimulated interest of many dentists in the Oral Lactobacillus Laboratory Service now being offered through the cooperation of the Bureau of Laboratories, and in free dental health educational literature available to them for office use and distribution.

Assistance was given to Lake County Health Department and Lake County Board of Public Instruction in republishing a teaching guide entitled "Truth About Teeth." Two hundred copies were distributed to teachers in Lake County schools, others to student-teacher classes at the University of Florida, and to teachers in a selected school in Dade County. Each included a questionnaire sheet to be used by the teachers in evaluating the book. When the evaluation reports have all been received, a committee will meet and amend the guide in line with the suggestions and criticisms received. The object of the work is to produce a good practical guide for elementary school teachers to use in teaching dental health and correlating it with other subjects.

FLUORIDATION

The addition of Orlando, Ocala, and Belle Glade this year to the list of cities using fluoridated water brings the total number in Florida to nineteen. Voters in Eau Gallie and Daytona Beach defeated fluoridation by small margins. The proponents in both communities conducted good programs, but it is felt that they did not start in time, or possibly employ the right techniques, to reach with their educational programs the large number of persons who are so easily influenced by the opposing group and who are more or less suspicious of the new, or to them, the unknown. Education of these persons requires time and patience.

Fluoridation of public water supplies will continue to be the number one effort in the bureau's educational and preventive program.

The stand taken by the State Board of Health in 1955, the reaffirmation of its endorsement of fluoridation, has been beneficial to the program. Copies of the January 1956 issue of Florida Health Notes, devoted exclusively to fluoridation, have been requested in large numbers from all over the state and from many other state health departments and organizations.

MOBILE DENTAL UNIT

The problem of retaining an operator for the mobile corrective unit continues to be a major concern and poses a serious handicap to the effectiveness of this phase of the over-all program. The unit was operated eight months out of the year and underprivileged elementary school children in 26 schools in five counties received dental care. A total of 592 patients, out of 707, were given complete dental service. Altogether 593 extractions were made, 1645 fillings (silicate, amalgam, cement) were inserted, 982 miscellaneous treatments and 551 prophylaxis were given. In addition, grades one through six in two schools were given dental examinations to determine the D.M.F. (decayed, missing, and filled permanent teeth) rate.

The operating dentist gave instructions on diet and oral care to the patients, gave classrooms and PTA talks on dental health and distributed dental health literature. This program is very well supported by the communities which also contribute financially to its maintenance.

**COUNTY HEALTH DEPARTMENT
DENTAL CORRECTIVE CLINICS**

Three additional counties established new dental corrective programs during the year. Polk began in July, Broward in October, and Volusia later in the year. All three operate permanent clinics in the county health departments. Polk has a full-time dentist; Broward, two part-time dentists; and Volusia has one part-time operator. It is encouraging to note that these three new clinics were initiated with budgeted funds by the county officials. In Broward County, the dental equipment was purchased by funds made available by a woman's club. But, it is discouraging to note that some of the larger counties which have conducted dental clinics for a number of years were unable to employ public health dentists, despite the availability of funds. Polk and Volusia Counties established their programs following dental surveys which showed the need for the service.

The dentists operating these full- and part-time clinics, in addition to their corrective service, gave chair instruction to their patients, distributed dental health educational material, presented talks and films to classrooms, to PTA and other groups. The report from Orange County is again outstanding in this respect as it shows the dentist made 554 classroom talks to 15,826 teachers and children, and also presented dental health films and talks to a number of other groups. Dental examinations of many children were done here also. This clinic is supported in part by the Orlando Kiwanis Club.

DENTAL SURVEYS

Two counties, Dade and Broward, conducted special baseline dental surveys. In Broward, the survey was on a selected basis for both white and negro elementary school children, and in some instances, junior high school students. A total of 4623 (3640 white and 983 Negro) children were examined.

The baseline surveys in Dade County were limited to two white schools, Sunset Elementary and North Miami Beach Elementary. In Sunset School, 1137 children were examined and in the latter school, approximately 1000.

All the examinations were made by local dentists. This bureau assisted by conducting educational programs in both areas prior to the surveys, assisting dentists and teachers in preplanning, holding meetings with school officials, making classroom and PTA talks, showing films and distributing dental health literature. A uniform method of making the examinations and the recordings was established. After the examinations were completed, teachers mailed cards to parents of every child who participated. The cards indicated the oral condition of the child at the time of examination and advised the parents to consult their family dentist.

DENTAL MOBILE X-RAY UNIT

The bureau did not have an operator for the dental X-ray service program which was set up late in 1955. It was used, however, in three counties, being operated by local dentists, on a voluntary basis, who took bitewing X-rays of elementary school children at certain selected age levels. The local dental society also purchased the bitewing films. The envelopes containing the X-rays are taken home by the children to their parents. The parents, in turn, take them to the dentist of their choice who develops and explains them to the family, without charge. Likewise, he advises the family as to treatment, if needed, and stresses the importance of good mouth hygiene and a well selected diet.

In addition to the communities using the mobile X-ray unit, this bureau cooperated with the Jacksonville Dental Society in conducting a dental X-ray program at the Greater Jacksonville Agricultural and Industrial Fair. The interest and response by the public to this project was excellent and the members of the Jacksonville Dental Society and their assistants who volunteered their services made a fine contribution to community health.

Each X-ray program was preceded by a dental health educational program by which the children, teachers, parents and the community as well, were made acquainted with the need for dental X-rays and the important role they have in early detection of beginning dental decay.

FLORIDA STATE FAIR EXHIBIT

A free dental bitwing X-ray program and dental health educational booth, for the third consecutive year, was conducted at the Florida State Fair, Tampa, January 31-February 11, through the joint cooperation of the State Board of Health, Hillsborough County Dental Society and the Tampa Dental Assistants. Each year there is increased interest and response from the public to this service. The dentists and their assistants gave their time and service. Together they contributed more than 792 man hours. Following the established custom, the dental X-rays are placed in an envelope, the envelope is sealed, and then given to the child to deliver to his parents.

The parents are urged to take the unopened envelope—within thirty days—to the dentist of their choice who will develop the films and explain them to the parents absolutely free of charge. He will also advise them as to treatment, if needed. In each envelope an evaluation card is placed and the dentists receiving films, fill out the cards, sign them, and mail to this bureau. All cards have signified that the dentists are in favor of the program and wish to repeat it the coming year. At this time, plans are well developed for the 1957 fair. The Community Coordinating Council furnished forty-eight workers to assist at the two desks. Approximately 6200 X-rays were taken. Tabulation of the evaluation cards mailed to this bureau show that a high percentage of the children X-rayed went to their family dentist. Dental health educational literature was distributed to the children who were X-rayed and to those persons visiting the booth who were interested in receiving it. Approximately 25,560 pieces were used.

ORAL LACTOBACILLUS DENTAL CARIES LABORATORY PROGRAM

This program, which is operated in cooperation with the Bureau of Laboratories, was initiated in mid-1955 and has increased in momentum as more dentists became interested in it and learn its value to them in the control of dental caries. When a saliva specimen is received in the laboratory, it is tested to determine the number of lactobacillus count per milliliter of saliva, and a report showing the findings is mailed to the patient's dentist. The laboratory findings are compared with the clinical findings and if they are both high, the dentists recommend a dietary program to the patient. The dentist then continues to have his patient submit saliva samples until the dental caries is under control. New and more accurate diagnostic techniques are now being used by the laboratory in connection with this service. The results are gratifying as many dentists have said that in nearly every instance the reports indicating negative, slight, moderate, or marked dental caries agree with their clinical findings. During 1956, 120 dentists representing 34 cities and towns in 16 counties, submitted 954 saliva specimens for laboratory analysis.

GAINESVILLE DENTAL CARE PROGRAM

This bureau continued to give assistance to this program by assigning its dental health educator to visit schools prior to the opening of the corrective clinic in a new area. In each school visited, the children were briefed on the purpose of the corrective clinic and the importance of good dental health habits was stressed.

DENTAL SCHOLARSHIPS

The second annual award of Florida State Dental Scholarships, ten, for the 1956-57 school year were awarded in midsummer, and the available quota was complete. There are now twenty dental students from ten different counties receiving \$1,000 a year to assist them with their dental education.

The interest in this program is increasing and it is not possible to award scholarships to all applicants. Applicants are accepted for an award on the basis of need and scholastic ability, as determined by the Scholarship Committee of the State Board of Dental Examiners and the Bureau of Dental Health. The applicants must also meet the requirements of citizenship in Florida.

THE VOLUNTARY AGENCIES

This year was marked by the unusual interest of many community groups in dental health education and remedial care for underprivileged children at the elementary school age level. Outstanding in this line was the establishment of a complete new mobile dental unit in Brevard County. The funds were made available by five civic groups. The county health department pays the salary of a full-time dental hygienist who makes dental examinations of school children and conducts dental health education programs in schools. Sponsors of this unit were: Cocoa American Legion, Lions Club, Cocoa Pilot Club, Cocoa Junior Woman's Club and the Cocoa dentists.

The Kiwanis Club of West Palm Beach continued its financial support and guidance of the Kiwanis Club Dental Clinic, established many years ago. This clinic is located in a very attractive building, designed and paid for by the Kiwanis Club. Its present full-time dental director and assistant are making the dental program in Palm Beach County a very worthwhile project. The Palm Beach County Health Department contributes financially to this project by payment of one-half the annual cost of the program.

The Pilot Club in Pensacola this year again contributed financially to the dental clinic for underprivileged children, as did the local chapter of the American Red Cross and the county health department. This clinic is staffed, part-time, by dentists from the local dental society on a voluntary basis.

The Woman's Club in Coral Gables maintains a dental clinic for underprivileged children and pays the salary of a part-time dentist.

In Broward County, this year, at Hollywood, the Pilot Club aided the Broward County Health Department and the Broward County Dental Society in the establishment of a new dental clinic. The salaries of two part-time dentists are paid by the county health department.

DENTAL ADVISORY COMMITTEE

The Dental Advisory Committee to the Bureau of Dental Health, composed of six members representing the five district dental societies in the state, has been very helpful this past year in solving some of the problems concerning expansion and operation of this program. At a meeting of the committee, held in April at Miami, plans were initiated to conduct a joint dental health workshop in the fall at the University of Florida.

The workshop was held in October at the Medical Sciences Building, at the University, and was well attended by officers of the State Dental Society, members of the Advisory Committee to the Bureau of Dental Health, members of the Public Education and Relations Committee, and the dental member of the Florida State Board of Health. The president of the Florida State Dental Society presided at this one-day workshop.

As a result of the discussions held, a close relationship and a better understanding of common problems now exist between the Bureau of Dental Health and the State Dental Society. Initial steps were taken to expand the dental program in the state by requesting that more funds be budgeted by the State Board of Health for dental health during the next biennium. The long-standing shortage of available dentists to fill public health dental positions in the state was also discussed and the group voted to lend its support and advice in reaching a solution to the problem.

This was the first joint workshop of this type held in the state and its success indicates that an annual workshop of this type would be worthwhile.

BUREAU OF ENTOMOLOGY

J. A. MULRENNAN, B.S.A., Director

It can be said at the outset that the year 1956 has been an unusual one as far as the control of arthropods affecting humans is concerned.

The best season ever experienced was noticeable in the control of dog flies on the Gulf Coast of Florida. It is rather difficult to determine whether it was due to better efficiency in the application of DDT to the grass deposits or whether there was less grass deposits washed ashore because of less turbulence in the bays from lack of high winds and storms.

The salt-marsh mosquito problem on the east coast of Florida for the most part was less severe than had been experienced during past years. The greatest annoyance was experienced in the fall of the year at the advent of the high tide season.

The west coast of Florida experienced a terrific salt-marsh mosquito problem from April to October. There were two factors responsible for this heavy breeding; namely, dry weather and monthly high tides. Ordinarily the greatest acreage of mangrove swamps are flooded during the summer months from rainfall, seepage from the higher ground and from two high tides each month that start in April and continue until October. In 1956, there was practically no rainfall and the mangrove swamps were flooded for five days once a month until October. The first flooding occurred in April bringing off a small brood of salt-marsh mosquitoes. The swamps dried and the mosquitoes oviposited on the damp soil, the eggs dried, which conditions them for hatching, and in May the swamps were reflooded bringing off a large brood of mosquitoes; the same thing occurred in June and July with an average of 1000 larvae per square foot of soil. In July all the swamps comprising about 10,000 acres in Pinellas and Hillsborough counties were pelletized with one per cent parathion at the rate of 10 pounds per acre which destroyed almost 100 per cent of the larvae.

There is great interest in the state in the creation of water impoundments for recreational and wildlife purposes. All these noble and worthwhile ventures add to the mosquito problems in the state and unless we remain on the alert, these could lead to sad consequences in renewed mosquito transmission of malaria and encephalitis infections of man, bird and horse.

The blind mosquito problem is becoming more acute each year. Sufficient experimentation has now been carried out to demonstrate the reasons for the heavy production of midges; namely, fertilization or enrichment of the lakes and rivers from orange groves, pastures, lawns, raw sewage, sewage effluent and nutrient materials from industrial plants.

Plans are now under way to determine if some economical way can be found to reduce the heavy production of these insects which are making living conditions unbearable near the lakes and streams of central Florida.

There is no question that 1956 brought some bitter experiences to the citizens of the state, but by the same token there was considerable room for rejoicing. It was a demonstrated fact that in those counties and parts of counties where considerable progress had been made in constructing ten-foot wide dragline ditches that there was no salt-marsh mosquito breeding taking place and this was in evidence in all counties. It points up one fact that in those counties where there is tidal flow and ditching can be economically undertaken, this method of salt-marsh mosquito control must be increased to more hurriedly bring the problem under control.

This type of mosquito control not only eliminates the salt-marsh mosquito problem, but it also increases the fish breeding and feeding grounds afforded by the minnow-access ditches that wind through the low depressions and swales in the many mangrove swamps skirting the southern coastal areas.

The over-all mosquito problem in the state is far from being solved. There are many sections of the state where at the present time there is no economical solution for building out the salt-marsh mosquitoes, and that is very true in Brevard, Citrus and Monroe counties.

In considering some of the worst fresh-water species there is absolutely no solution in sight for building out by permanent means these mosquito problems.

It is quite apparent that research and technical development must be encouraged and supported in order that we find solutions to many of these unsolved problems that have been so long placed in the background, and the many new problems that are being brought about by changing environments by urban expansion, industrial development, agricultural pursuits and the creation of water impoundments.

FUNDS AVAILABLE FOR ARTHROPOD CONTROL, RESEARCH AND ADMINISTRATION

The State Board of Health had available \$1,895,691.00 for arthropod control during the fiscal year 1956-1957. Of this amount, \$1,592,161.00 was allocated as direct aid to counties and districts, and \$303,530.00 was available for research, administration and technical assistance to counties.

The following counties participated in the state arthropod control program during the year. Based on the fiscal year of the counties, and as of the end of the calendar year 1956, the local budgets for arthropod control activities are shown:

Alachua	\$ 17,746.91
Bay	23,491.84
Bay (Panama City Beach)	16,350.00
Brevard	301,846.00
Broward	50,000.00
Calhoun	7,926.18
Charlotte	9,736.00
Citrus	20,119.10
Collier	17,149.42
Dade	145,880.00
E. Duval	40,858.73
Escambia	66,770.00
E. Flagler	9,661.00
Franklin	9,000.00
Gadsden	3,256.95
Gulf	17,500.00
Hernando	1,939.54
Hillsborough	75,525.00
Indian River	132,698.72
Lake	27,725.00
Lee (Boca Grande)	9,480.00
Lee (City of Ft. Myers)	69,926.62
Lee (Ft. Myers Beach)	21,406.00
Lee (Sanibel-Captiva)	6,600.00
Leon	25,508.00
Levy	6,500.00
Madison	550.00
Manatee	40,209.82
Martin	23,361.18
Monroe	71,834.72
Nassau (Amelia Island)	27,383.75
Okaloosa	24,431.81
Orange	5,000.00
Osceola (Kissimmee)	4,500.00
Osceola (St. Cloud)	3,000.00
Palm Beach	127,068.00
W. Pasco	12,162.12
Pinellas	150,000.00
Polk	92,765.15
St. Johns (Anastasis Island)	28,663.00
St. Lucie	50,422.50
Santa Rosa	16,350.00
Sarasota	57,000.00
Suwannee (City Live Oak)	4,878.23
Taylor	3,000.00
E. Volusia	143,681.06
Wakulla	16,200.00
Walton	3,165.67
	\$2,040,228.02

SOURCE REDUCTION ACCOMPLISHMENTS

The emphasis in arthropod control has continued to be toward elimination of mosquito breeding areas and source reduction of other arthropods.

The following tabulation shows accomplishments during 1956, as compared with the previous year, of major items of work performed by mosquito control districts and counties in their intensified efforts toward the elimination of breeding areas:

	1955	1956
<i>Hydraulic Dredging</i>		
Cubic yards of earth fill placed	1,129,399	1,367,133
Acres of mosquito breeding area eliminated	399	631
<i>Deepening, Filling & Grading</i>		
Acres of mosquito breeding area eliminated	569	741
<i>Diking</i>		
Miles of dike constructed	47	77.4
Cubic yards earth moved	397,935	803,043
Acres of mosquito breeding area diked	6,312	4,486
<i>Ditching (New Construction & Maintenance Combined)</i>		
	1955	1956
Machine ditching	335.8 mi.	374.25
Hand ditching	276.6 mi.	236.62
Dynamite ditching	14.4 mi.	0
Cisterns, Cesspools, wells, etc. filled	165	179
Sanitary landfills operated	27	28

ENTOMOLOGICAL ACTIVITIES

The bureau has continued to provide entomological and engineering assistance to mosquito control districts and counties in all matters related to their arthropod control programs. The central office staff includes the director, two sanitary engineers and two entomologists who work throughout the entire state. The engineers assist the counties and districts in developing engineering plans and operational annual budgets for the control of arthropods in areas indicated for control measures by the entomologists. One staff entomologist is in charge of entomological field activities and the other is in charge of enforcement activities of Florida's Structural Pest Control Laws. In addition, four regional entomologists are located in assigned areas.

Entomological field activities during the year consisted of giving direct entomological and technical assistance to counties and mosquito control districts in defining their various arthropod problems; in outlining and studying arthropod breeding areas; reviewing mosquito control projects proposed in the districts' or counties' work plans for justification of their construction from an entomological standpoint; and training district and county personnel to perform entomological investigations. In addition, all regional entomologists assisted county health departments, when called upon, in recommending control measures for various minor arthropod problems in the counties; and assisted with the enforcement of Florida's Structural Pest Control laws and State Board of Health rules and regulations promulgated thereunder.

An extensive salt-marsh mosquito breeding survey was conducted in the area of lower Dade and upper Monroe counties during the year. Much of the area investigated lies within the Everglades National Park. The principal purpose of the survey was to determine insofar as possible whether large flights of salt-marsh mosquitoes migrate from the expansive breeding marshes and mangrove swamps along the southern and southwestern shores of the state into the heavily populated sections of Dade County. No conclusions are reported here since the data are currently being assembled and evaluated.

ENGINEERING ACTIVITIES

Engineering activities consisted of making engineering surveys and plans; reviewing areas and plans for construction of mosquito control projects; offering recommendations on the economy and efficiency of various mosquito control projects and programs; and assisting districts and counties with work plans, detailed budgets, record keeping systems and other fiscal matters. In addition, a permanent control program was inaugurated in Lee County and directed by the bureau. Four draglines were purchased and operated for the last half of the year. The operation of the program provided an opportunity to make a cost analysis on field operations and to install economy measures, which resulted in a reduced cost for mosquito control ditches.

ARTHROPOD IDENTIFICATION LABORATORY

The laboratory located at the central office identified approximately two and one-half million adult mosquitoes and over fifty thousand sandflies during the year from the semi-weekly operation of more than a hundred mosquito light traps located throughout the state and from special trapping devices. Also identified were 11,213 mosquito larvae sent in by various mosquito control districts.

In addition, numerous miscellaneous identifications were made of various arthropods sent in by county health departments, private physicians and other individuals requesting identification and recommendations for control.

The Entomological Research Center identified a total of 1,840,032 female adult mosquitoes as well as 5837 mosquito larvae.

The continued weekly distribution of the *Florida Salt-Marsh Mosquitogram* giving semi-weekly collection counts of salt-marsh mosquitoes in 43 mosquito light traps selectively located along the coastal areas, provided information on the salt-marsh mosquito population for the coastal counties and mosquito control districts in which the traps were located.

STRUCTURAL PEST CONTROL

The Bureau of Entomology was very active in the enforcement of the Structural Pest Control Law of 1947, as amended; the Thermal-Aerosol Law of 1949, and the respective rules and regulations for each promulgated by the State Board of Health appertaining thereto.

A constant increase in the cooperative attitude of the structural pest control industry has greatly benefited the efforts and achievements of the bureau in carrying out its assigned duties. Representatives of the bureau actively participated in the Pest Control Training Course at Gainesville in November, 1956, and at various pest control industry meetings throughout Florida.

The efficacy of the Structural Pest Control Law of 1947, as Amended, was again enhanced when the State Board of Health revised the rules and regulations in October, 1956, appertaining to the enforcement of this law. Efforts were made by the bureau to adjust the rules and regulations to apply more justifyingly to the present conditions and changes in the pest control industry. This was a combined program of the State Board of Health, the Structural Pest Control Board, and the pest control industry.

During 1956 the bureau received and impartially investigated approximately the same number of property holder complaints against pest control firms as entered in 1955. The bureau and the Pest Control Association are continuing in their combined efforts to promote higher standards of workmanship and better public relations between the industry and property holders.

REGISTRATIONS

	1953	1954	1955	1956
State Board of Health License issued	184	196	202	210
State Board of Health Licenses Revoked	0	0	3	1
Employees Identification Card Licenses issued	789	910	1013	1485
Thermal-Aerosol Certificates of Authorization issued	3	1	1	0
Thermal-Aerosol Certificates of Authorization renewed	18	19	16	14
Thermal-Aerosol Certificates of Authorization revoked	0	0	0	0

INVESTIGATIONS

Homeowner Complaints Investigated	110	105
Number of non-licensed questionable illegal pest control operators investigated	34	15
Number of charges preferred against non-licensed illegal pest control operators	8	3

MALARIA AND TYPHUS SURVEILLANCE

The incidence of malaria and endemic typhus continued to remain low. Still, through this year, none of the confirmed reported cases of malaria have been authenticated as being indigenous to Florida since 1948. Much credit for the continued low incidence of typhus and the absence of malaria transmission may be attributed to the county health departments and the two Bureau of Entomology district supervisors stationed in their assigned districts of the state. These men work in close cooperation with county health departments in promoting rodent control and arthropod control in rural and urban areas and in maintaining a close surveillance against malaria and typhus resurgence.

A five-year comparison of the incidence of malaria and typhus is shown in the following tabulation:

Year	Malaria	Typhus
1952	50	11
1953	19	10
1954	11	6
1955	13	11
1956	11	6

ENTOMOLOGICAL RESEARCH CENTER ACTIVITIES

The Entomological Research Center at Vero Beach was formally dedicated on April 8, 1956. Dr. Herbert L. Bryans, president of the State Board of Health, welcomed the many guests who were then addressed by Dr. Wilson T. Sowder, the State Health Officer and by Mr. George W. Simons, a pioneer in the mosquito control movement in Florida. Dr. Bryans presented the keys to the new building to Dr. Maurice W. Provost, the director of the Research Center. The assembly room of the new building was then dedicated to the memory of Edward Becton, president of the Florida Anti-Mosquito Association and director of the Indian River Mosquito Control District at the time of his death on April 23, 1955. Mr. Becton had been a strong advocate for the establishment of the Research Center and was influential in bringing it into being. Mr. Fred H. Stutz, president of the American Mosquito Control Association, delivered a commemoration address, and Mrs. Clara Mae Becton unveiled the portrait of her husband which is to remain in the room dedicated to his memory. The dedication ceremonies, for which John A. Mulrennan, director of the Bureau of Entomology acted as master of ceremonies, were well-attended.

The greatest advance of the year at the Research Center was the development of a control research section, under Dr. Andrew J. Rogers. The physiology section was still on paper only at the end of the year, but the ethology and ecology sections had both come closer to their planned staffing. The recruiting of biologists was still a difficult and slow task.

I. ETHOLOGY SECTION

With the return of Dr. E. T. Nielsen in April from a year of work in Iraq, the development of a mosquito actograph was resumed. The final product was a design based on time-lapse photography: a cinemactograph. This was tested and found satisfactory for the quantitative analysis of behavior cycles and rhythms. A description of the apparatus was prepared and submitted for publication. Also, the cinemactograph was instrumental in obtaining a grant from the National Institute of Health for its further development and use in behavior studies.

Nine experiments were carried out to get information about the effect of temperature on development of *Aedes taeniorhynchus* and *A. sollicitans*. Unexpected differences were found between different populations of *A. taeniorhynchus*. Experiments will continue when new equipment for this type of work has been assembled.

Several new observations were made of the migratory exodus in

salt-marsh mosquitoes. This phenomenon is difficult to observe, and the year's study was one of the most fruitful yet in establishing the conditions under which migrations are initiated.

Laboratory techniques for getting *Aedes taeniorhynchus* to lay eggs in a manner to facilitate their retrieval were worked out as a preliminary to colonizing this mosquito.

The salt-marsh sandfly (*Culicoides furens*) studies were continued, with emphasis on developing a better larval sampling technique. Laboratory life-history studies of this same insect indicate that mature larvae are unable to pupate under water; they crawl above the waterline and pupate at the surface of the soil. If they cannot find emergent soil, the larvae ascend emergent twigs, e.g., *Batis maritima*, to pupate. If flooded after having pupated the pupae will float to the surface and the adult will eventually emerge successfully therefrom.

II. ECOLOGY SECTION

The effect of irrigation in pasture and groves on the production of flood-water mosquitoes was studied further. It was well established this year that irrigating groves and pastures with deep well water in Indian River County created *Aedes sollicitans* breeding.

Studies of salt-marsh minnows were carried on throughout the year to establish what species were in the tidal areas and to what extent these fed on mosquito larvae. Systematized minnow collecting was done in a pre-selected area after its first flooding of the year to establish the degree of larvivorous activity in alleged mosquito-eating fish and to determine the extent, if any, to which species other than traditional larvivorous fishes are larvivorous during the height of the salt-marsh mosquito abundance. The breeding cycle of *Fundulus* minnows was further explored.

Extensive sampling for salt-marsh sandfly (*Culicoides furens*) larvae showed the largest concentrations to be along ditches and ponds in the salt marsh where the soil is kept moist by adjacent water. Larvae were found in low numbers across the surface of the marsh as long as it was kept moist by rain or high tides, but they disappeared as the marsh dried. Larvae were found in all types of soil, only clays yielding low numbers consistently. Most of the larvae were found at or just above the water line.

In Polk County an attempt was made to correlate the production of chironomid midges ("blind mosquitoes") with sources and quantities of nutrients in the lakes producing them. The problem was approached limnologically by making systematic determinations of such factors as turbidity, temperature, pH, alkalinity, dissolved oxygen, B.O.D., ions, etc. for correlations with chironomid larval distribution and distribution of their food which is plankton. At

the end of the year, the data from this summer's field work were still being analyzed.

III. PHYSIOLOGY SECTION

As mentioned earlier, this section of the research center is still not organized.

IV. CONTROL RESEARCH SECTION

The section of Control Research was activated February 1, 1956 when Dr. Andrew J. Rogers was employed to direct its program. The section has the responsibility for all research relating directly to control measures for arthropods of public health importance: insecticides and their use, mosquito source reduction, etc. In addition, this section is responsible for liaison between the mosquito control districts of Florida and the Entomological Research Center.

MOSQUITO SOURCE REDUCTION

Early in 1956 the Citrus County Mosquito Control District constructed two diked plots on salt marsh to determine whether tides could be kept off the marshes by diking and whether this would be sufficient to control mosquito breeding. The research center was asked to evaluate this project. By the year's end it had been demonstrated that the dikes were successful in keeping tides off the experimental plots, but that this was not an effective method of controlling mosquitoes since rainfall flooded the diked areas and produced mosquito hatches. In 1957 an attempt will be made to keep the diked areas constantly flooded by using tide-gates. A ditching experiment will also be initiated in 1957. The vast salt marshes of Citrus and adjacent counties are underlain by rock and in many other ways are different from all other Florida salt marshes, hence the attempt to solve the problem here of permanent mosquito control.

In Brevard County, the research center (1) evaluated existing impoundments and (2) experimented with dike construction. The evaluation study reached the following conclusions: (1) where salt marshes were kept continuously flooded, salt-marsh mosquito breeding was prevented, (2) flooding by use of excess irrigation water or flowing wells was much less expensive than flooding by pumping, (3) flooding with fresh water brought on the breeding of fresh-water mosquitoes. Recommendations were made for the operation and continued evaluation of the impoundment program, with the evaluation stressing potential problems and hazards of the method.

The diking experiment was an evaluation of various dike construction methods based on water-holding capacity. The eight randomized, small plots were two of each of the following: (1) complete

dike, ditch outside plot, (2) complete dike, ditch inside plot, (3) on their impoundment programs. A diking experiment similar to the dike adjacent to high ground, ditch inside plot. Water holding capacity was judged by flooding plots until each had the same head of water then recording water levels until no head remained. The best plots were the number 3 types,—this being applicable at least to the southeastern parts of the county.

During 1956 assistance and advice was also given to the Indian River County and the St. Lucie County Mosquito Control Districts on their impoundment programs. A diking experiment similar to the one in Brevard County was constructed in Indian River County on an entirely different marsh soil type. Limitation of time, equipment, and personnel forced a delay of the evaluation until 1957.

CHEMICAL CONTROL OF MOSQUITOS

(Larvicides)

An unusually large hatch of salt-marsh mosquitoes in the Tampa Bay area in early July was eliminated in an extensive emergency airplane larviciding project performed jointly by the mosquito control districts of Pinellas and Hillsborough counties, USPHS, and the State Board of Health. Highlights of the evaluation report prepared by the Research Center were: (1) Parathion at 0.1 pounds per acre was 100 per cent effective in killing larvae of *Aedes taeniorhynchus* and *A. sollicitans* where good coverage was obtained. (2) Malathion at 0.4 pounds per acre gave inconclusive results; however, the material used was later proved to have been not of full strength and subsequent tests with good malathion yielded satisfactory larval kills at this dosage. (3) Both parathion and malathion as used killed several species of salt-marsh minnows and many fiddler crabs.

CHEMICAL CONTROL OF MOSQUITOS

(Adulticides)

Personnel of the Control Research Section, cooperating with Mr. Jon Beidler, Director, Indian River Mosquito Control District, tested aerosols as mosquito adulticides. The 1956 objective was to find an effective and economical dosage of an insecticide which could be used by any district to control adult mosquitoes within limits of safety to the human population. This research was prompted by complaints of many districts that DDT was no longer effective in controlling adult mosquitoes.

A satisfactory outdoor cage test was first developed and was then applied to DDT, malathion, pyrethrum-piperonyl butoxide mixtures and thanite. The tests resulted in a recommendation of malathion at 0.1 per pound per acre to all mosquito control districts which were

experiencing poor results with DDT and other chlorinated hydrocarbon insecticides.

This research in 1956 aimed only at dosage information. The work will be expanded in 1957 to include such problems as operating pertinent operational problems.

"BLIND MOSQUITO" CONTROL

In early summer 1956 the research center was called upon to assist with research on chemical control of chironomid midges in Polk County. EPN had been shown to be an effective larvicide in previous studies, but it, along with previously used chlorinated hydrocarbon insecticides, has apparently lost its effectiveness with use. Presumably the midges had become resistant to all these chemicals, but other explanations had first to be discounted, the chief being the belief that the insecticides were not reaching the larvae which are in the lake bottoms.

Plot studies of granulated EPN at various dosages were carried out in lakes of the Winter Haven area. The maximum larval kill was 71 per cent, at a dosage of 0.2 pounds of EPN per acre. It was felt that higher dosages would not be economical. Also because of a minimum of information on the effects of larger dosages on other animal life in the lakes, and especially the possible hazards to humans using the lakes, the field tests were terminated. Wettable powders of EPN were also tested, with similar results at comparable dosages. It therefore appears that the chironomid midges or "blind mosquitoes" of the Winter Haven area are indeed more tolerant of EPN than when it was first used so successfully in controlling them.

The investigations will be carried on in 1957 on a much expanded scale.

Articles by staff members:

- Lieux, D. B. and Murren, J. A. Investigation of the Biology and Control of Midges in Florida (Diptera: Tendipedidae.) Mosq. News 16:201-4, Sept., 1956.
- Philen, E. A. and Carmichael, G. T. The Management for Mosquito Control in the Coastal Marshes of Florida. Mosq. News 16:126-9, June, 1956.
- Beck, Elisabeth C. A New Species of Culicoides from Florida With Additional Distribution Data for the Genus (Diptera: Heleidae). Fla. Ento. 39:133-8, Sept., 1956.
- Harrington, Robert Whiting, Jr. An Experiment on The Effects of Contrasting Daily Photo-periods on Gametogenesis and Reproduction in the Cen-archid Fish *Enneacanthus obesus* (Girard). J. Exp. Zool. 131:203-224, 1956.

BUREAU OF MENTAL HEALTH

W. LANEY WHITEHURST, M.D., M.P.H.,
Director

The Bureau of Mental Health (which formerly had division status) was established in July, 1955. In October of 1955, a full-time psychiatric consultant was added to the staff. He became director in February, 1956.

As of December 31, 1956, the professional staff of the bureau consisted of the following:

Psychiatrist-Director (See above); Chief Psychologist Consultant—Melvin P. Reid, Ph.D.; Psychiatric Social Work Consultant—Mrs. Joanna F. Gorman; Mental Health Nursing Consultant—Miss Helen McKey.

With increasing emphasis being given the mental health program by the State Board of Health, there has been a broadening of the interests of the bureau in the total picture of mental health problems. There has been not only interest in the activities of psychiatrists, psychologists, psychiatric social workers and psychiatric nurses, but also increasing concern with auxiliary personnel and services. Efforts have been made to help the above professions and services more fully utilize known mental health techniques and tools for the benefit of the people of Florida.

This bureau is primarily concerned with prevention of mental illness, the building of social forces, the nature of human relationships, and with community, state, regional and federal programs designed to maintain and strengthen the emotional and mental well being of all our citizens. It also attempts to strengthen and coordinate varied services and programs so there will be a minimum of duplication and a maximum of service.

The members of the staff participated not only in the above activities in Florida, but also in the southeast region. For example, there was a Regional Mental Health Educational Institute involving the six southeastern states. This institute was sponsored by the National Institute of Mental Health and concerned mental health teamwork in meeting the needs of the exceptional child. Florida, as the host state, was granted funds by NIMH to carry on a two-year program in this field which was done in cooperation with the State Department of Education.

MENTAL HEALTH AND CHILD GUIDANCE CLINICS

One of the continuing responsibilities of this bureau is to furnish assistance, consultation, and support to mental health centers and clinics. While no new clinics were added during 1956, the exist-

ing 14 child guidance and mental health clinics continued their efforts to meet community needs. One of the clinics opened up a part-time branch in a neighboring city, bringing to two those who have such branches: Pinellas Clinic in Clearwater and Bartow Clinic in Lakeland. The administrative organization of these 14 clinics varied from mental health divisions in county health departments or a psychological clinic of the coordinated university clinical services program to operation by an independent board of directors representing professional and lay groups in the county. As in past years, funds for their operation were received, regardless of the organizational pattern, from USPHS grants and appropriations from the State Legislature both administered through the State Board of Health. Other significant sources of support were special education units from the State Department of Education and local boards of public instruction, civic and social clubs, city councils, community chests, county commissioners and fees for patient services. The bureau was active in 1956 in offering a team of consultants to the clinics on matters ranging from statistical reporting procedures to assistance in the formulation of basic clinic policies. The development of in-service training programs and workshops for professional staff members of the clinics continued to play an important part. Improvements in standard and uniform statistical reporting were accomplished during the past year. As the year ended several additional out-patient psychiatric facilities had begun submitting statistical reports and patient data to the bureau for forwarding to the National Institute of Mental Health.

The 14 clinics in operation during 1956 were as follows:

Florida Center of Clinical Services, University of Florida, Gainesville
 Bay County Child Guidance Clinic, Panama City
 Broward Mental Hygiene Clinic, Inc., Ft. Lauderdale
 Dade County Child Guidance Clinic, Miami
 Duval County Child Guidance & Speech Correction Clinic, Jacksonville
 Escambia County Child Guidance Clinic, Pensacola
 Hillsborough County Guidance Clinic, Tampa
 Mental Health Clinic, Leon County Health Department, Tallahassee
 Manatee-Sarasota Guidance Center, Bradenton-Sarasota
 Orange County Guidance Clinic, Orlando
 Palm Beach County Guidance Center, West Palm Beach
 Pinellas County Child Guidance Clinic, St. Petersburg
 Polk County Guidance Center, Bartow
 Volusia County Health Department, Daytona Beach

Chief among the problems encountered by the clinics were the shortage of trained personnel in all professions, (at the end of the year there were eleven budgeted vacancies for clinical psychologists, four for psychiatric social workers and two for full-time psychiatrist-directors) inadequate salaries to maintain existing staff; a relative decrease of traditional local and community sources of support; the ever-increasing waiting list for patient service and growing demand for mental health leadership in the community; inadequate housing facilities for expanding programs, and the development of functional clinic policies regarding personnel practices and relationships with other health agencies. The bureau is constantly evaluating the clinic program in its effort to implement, amend, and sharpen this phase of the bureau's contribution to the total mental health program.

Statistical reports from the clinics are made by discharged patient reports on each patient for whom services are terminated during the month. In 1956, 4767 patients received diagnosis, treatment or another type of service from the 14 Child Guidance and Mental Health Clinics.

Diagnosis, treatment and general service to patients represent however no more than 80 per cent of the total professional man-hours of the clinics' activities. In a single month in 1956, nearly 1000 hours were devoted to community educational services in keeping with the idea that these clinics are essentially preventive and that clinic personnel have a broader responsibility for mental health than merely service to patients. The clinic staff members devoted many hours to in-service training of other professional groups, particularly public health personnel, consultation services, and conferences with schools, courts, private physicians, probation officers, police, social and welfare agencies, health agencies, etc. The dissemination of current and reliable mental health information and general principles of mental health, child rearing practice, human relationships and family living, are closely related to the clinic's philosophy of envisioning the mental health program as essentially preventive.

The professional staff of these clinics is composed of two full-time psychiatrists, 12 part-time psychiatric consultants, 31 clinical psychologists, 24 psychiatric social workers, two speech therapists and one hearing teacher.

MENTAL HEALTH WORKER PROGRAM

In order to find an effective way to implement mental health services throughout Florida, a demonstration project was begun in DeSoto-Charlotte-Hardee Counties in 1954. Its success marked the beginning of the Mental Health Worker Program. Professional workers (psychiatric social workers, nurses, and clinical psychologists) serve on the staffs of county health departments where they assist in carrying on a mental health program including community organization for

mental health, counseling, consultation to other agencies, mental health education, clinic referrals and follow-up services to patients furloughed from State hospitals. They receive professional consultation from the nearest child guidance or mental health clinic as well as from this bureau. In 1955 this program was added in St. Lucie and Collier Counties and further study was carried on. By 1956 the program was found to be so successful that it was begun in Nassau, Baker, Putnam and Flagler Counties. By the end of the year five mental health workers were serving ten counties, and plans were under way for the extension of this program to other parts of the state.

An organized program has been provided for all mental health workers to supplement their training and orient them to this new type of work.

EDUCATIONAL ACTIVITIES

Considerable in-service training has been stimulated by this bureau. There have been group dynamics workshops, study groups for public health nurses, orientation programs, workshops for mental health workers, meetings of psychiatrists, psychologists, psychiatric social workers, mental health workers, annual clinic staff meetings, workshops on human relations, etc.

Other educational activities have concerned study groups with teachers and other school personnel, workshops for mental health and PTA groups, assistance at the State PTA Congress, workshops for welfare workers, rehabilitation counsellors and assistance in training social work students at the University of Florida.

A conference on Mental Health in the Schools was held. Those attending were representatives from the State Board of Health, State Department of Education and resource persons from out of state. The topic for discussion was the expansion of the guidance program in the school system.

CONSULTATION SERVICES

This bureau makes its services available, on a consultation basis, to any group or individual within the state. Most of the requests for these services come from clinics and communities wishing to set up some form of mental health services. Specifically, in 1956 consultation services were given to:

NURSES: To various nursing groups who wished to deepen their understanding of mental health and mental health techniques.

FLORIDA ASSOCIATION OF MENTAL HEALTH: To the board of directors.

FLORIDA FARM COLONY: To the administration in planning for a more effective training and service program.

INDUSTRIAL SCHOOL FOR BOYS AT MARIANNA: To the administration in planning more intensive psychiatric service for the inmates.

UNIVERSITY OF MIAMI: To the administration relative to the establishment of psychiatric services for students attending the university, particularly in the Schools of Medicine and Psychology.

FLORIDA STATE UNIVERSITY, SCHOOL OF SOCIAL WORK: To the faculty concerning the inclusion of mental health and public health in their undergraduate curriculum.

STATE DEPARTMENT OF EDUCATION: To the staff relative to the work of health coordinators within the school system.

COUNCIL ON TRAINING AND RESEARCH IN MENTAL HEALTH

The Council on Training and Research advises and consults with the State Board of Health which has been given the responsibility of administration of \$250,000 granted by the 1955 legislature for training and research in mental health. The director of the bureau serves as liaison officer between the council and the State Board of Health.

A full report of the Council's activities will be found immediately following this bureau's report.

INTERIM LEGISLATIVE COMMITTEE

During the past year, the director made himself available to the Interim Legislative Committee on Mental Health of the Florida State Legislature, and at their request attended all meetings of this body. In response to their request, a survey was made to determine the number of psychotic children in the state in order to guide them in legislation for these children. One hundred and five children were located and after thorough evaluation, were found to have mental illness to such a degree as to require some type of in-patient psychiatric care.

FOLLOW-UP SERVICES

In February, 1956, the directors of county health departments voted at their annual conferences to accede to the suggestion of the bureau in beginning to provide follow-up services to paroled and discharged patients from Florida State Hospital. Considerable time and effort of the bureau personnel have been directed towards assisting the county health departments to integrate this service into their local programs. This service is an out-growth of the cooperative efforts of this bureau, the staff of Florida State Hospital and the

Division of Public Health Nursing in working out an orientation program for public health personnel whereby many of the county (and a few of the state) employees have spent three days at Chatahoochee. To date, approximately 17 health officers and 51 public health nurses from 35 counties have participated in this program. From this experience has come added interest in the follow-up program since the problems of the hospitalized mentally ill patient have been seen at firsthand.

Plans have been developed with the Exceptional Child Division of the Florida Department of Education to inaugurate the detection and reporting of emotionally disturbed children. This includes the development of criteria for the initial screening of children suspected of having emotional disturbances by their teachers. The method of referring the children to the public health nurses, who in turn would refer them to a mental health center, and a system of record keeping on these children have been worked out.

THE FUTURE

Preliminary discussions have been held this past year concerning:

- * A limited follow-up study of patients discharged from the hospital on tranquilizing drugs.
- * Proposed statistical studies of individual clinic loads in an effort to determine the type of patients best handled by the child guidance clinics.
- * Proposed study of sociological background of a community prior to placement of mental health worker there, and a similar follow-up study after a worker has been there a few years to determine the effect of his work on the community.

Future plans envisioned are:

- * Providing additional personnel to the fourteen child guidance and mental health clinics so that clinic services can be offered to nearby counties which lack these facilities.
- * Employment of persons especially skilled in mental health techniques and practices as members of county health department staffs.
- * To provide some preventive mental health services to our citizens through in-service training of present public health personnel in order to sharpen their present skills and learn new techniques in mental health.
- * It is hoped that a sufficient number of mental health workers will be employed by the end of 1959 to serve the majority of Florida's 67 counties.

TABLE 50
DISCHARGED PATIENTS BY CLINICS, TYPE OF SERVICE, CONDITION
ON TERMINATION, REASON FOR DISCHARGE AND REFERRAL SOURCE,
FLORIDA CHILD GUIDANCE CLINICS 1956

CLASSIFICATION	C L I N I C														
	Florida	Alachua (Gainesville)	Bay	Broward	Dade	Duval	Escambia	Hillsborough	Leon	Manatee— Sarasota	Orange	Palm Beach	Pinellas	Polk	Volusia
TOTAL PATIENTS.....	4,767	1,069	223	218	219	483	204	427	327	115	256	160	511	218	337
TYPE OF SERVICE															
Diagnosis and Treatment.....	871	69	135	83	76	86	67	79	65	3	61	54	64	22	7
Diagnosis Only.....	2,189	631	86	70	20	170	99	231	62	22	138	68	250	136	206
Other Services Only.....	1,575	367	2	65	121	164	38	107	200	90	57	38	146	57	123
Adoption Study.....	132	2			2	63		10					51	3	1
CONDITION ON TERMINATION															
Improved after Treatment.....	674	46	13	60	60	62	50	48	58	3	47	46	47	12	5
Unimproved after Treatment.....	196	23	5	23	15	25	17	30	7		14	8	17	10	2
Not Treated.....	3,897	1,000	88	135	144	396	137	349	262	112	195	106	447	196	330
REASON FOR DISCHARGE															
Completed Service.....	3,198	752	167	83	111	333	106	271	281	60	194	83	375	141	241
Referred Elsewhere.....	339	16	7	46	34	29	29	40	10	11	12	16	28	31	30
Left Town.....	166	33	13	13	2	17	15	12	6	4	6	4	21	4	16
Did Not Return.....	1,064	268	36	76	72	104	54	104	30	40	44	57	87	42	50
REFERRAL SOURCE															
Self or Family.....	1,350	533	59	76	89	76	74	12	34	6	52	5	145	77	4
School.....	1,451	298	81	34	59	136	34	85	131	31	85	86	98	25	268
Court.....	370	12	12	23	7	19	29	129	9	3	22	16	76	25	14
Agency.....	666	15	34	24	15	166	20	50	77	26	36	16	119	54	16
Physician.....	501	29	32	48	40	31	39	29	34	34	43	30	61	35	35
Other.....	429	194	5	13	9	55	8	14	42	15	18	7	12	2	

TABLE 51
DISCHARGED PATIENTS BY AGE, RACE, SEX AND DIAGNOSIS
FLORIDA CHILD GUIDANCE CLINICS, 1956

FLORIDA CHILD GUIDANCE CLINICS, 1930														
DIAGNOSIS	Total Patients	A G E								R A C E A N D S E X				
		0-4	5-9	10-13	14-17	18-20	21-29	30-44	45-64	65 +	W M	W F	C M	C F
		351	1,249	920	780	540	509	326	84	8	2,884	1,574	200	109
TOTAL	4,767													
BRAIN SYNDROMES (Acute, Chronic)														
Associated with convulsive disorder (Idiopathic epilepsy)	66	7	26	19	8	3	2		1		40	19	4	3
Associated with cerebral arterio-sclerosis or senile brain disease	13	1	5	2	3				1	1	10	3		
All other brain syndromes	173	23	8	30	23	5	5	4	2	1	111	48	8	6
PSYCHOTIC DISORDERS														
Involuntary psychotic reaction	2								1	1	1	1		
Affective reactions	5		1					3	1		1	4		
Schizophrenic reactions	60		5	7	22	4	10	11	1		28	20	7	5
Paranoid reactions	1								1			1		
Other psychotic reactions	1													
PSYCHOPHYSIOLOGIC AUTONOMIC AND VISCERAL DISORDERS (psychosomatic disorders, and organ neuroses)	21		11	2	3		1		4		14	7		
PSYCHONEUROTIC DISORDERS														
Anxiety reaction	131	1	39	29	14	7	13	21	7		70	57	3	1
Dissociative reaction	21		1	2	4		1	7			4	16		
Conversion reaction	14		1	2	4	1	1	4	1		3	11		
Phobic reaction	15	1	10	4	3	2	3	14	1		12	2	1	
Obsessive compulsive reaction	30	1	3	3	5		5	10	4		15	14		1
Depressive reaction	28	1			2		1	8	1		2	13		
Psychoneurotic reaction, other	15		1	2	2									
PERSONALITY DISORDERS														
Personality Pattern Disturbance	156		19	28	32	10	24	36	6	1	80	74	1	1
Personality Trait Disturbance	368	4	97	87	63	15	39	49	13	1	225	138	3	2
Sociopathic Personality Disturbance	59		6	18	26	3	5		1		46	12	1	
Special Symptom Reaction	92	8	50	27	5	1	1				65	25	1	
TRANSIENT SITUATIONAL PERSONALITY DISORDERS, (Adjustment reactions, etc.)	730	22	266	207	154	20	35	19	6	1	430	271	16	13
MENTAL DEFICIENCY (Familial or Hereditary)														
Mild	47	5	19	15	7	1					25	11	9	2
Moderate	66	4	35	17	8	2					27	18	15	6
Severe	49	1	14	25	6				1		14	9	15	11
Severity not specified	1		1									1		
MENTAL DEFICIENCY (Idiopathic)														
Mild	88	13	32	19	20	1		1	2		47	36	4	1
Moderate	126	7	46	33	31	1	5	1	1		59	46	14	7
Severe	58	10	19	14	10	2	2	1			27	16	9	6
Severity not specified	12	4	7	1							8	2	2	
NO PSYCHIATRIC DISORDER FOUND	677	80	45	29	109	249	139	23	3		495	168	7	7
NO DIAGNOSIS MADE	1,642	158	410	295	218	211	211	113	24	2	1,016	513	79	34

FLORIDA COUNCIL ON TRAINING AND RESEARCH IN MENTAL HEALTH

Robert W. Kleemeier, Ph.D., Chairman
 Mrs. E. C. Rogers, Secretary
 Sullivan G. Bedell, M.D.
 John T. Benbow, M.D.
 William S. Frates
 Loyal Frisbie

Mrs. E. William Gautier
 Mrs. Sonia L. King, R.N.
 Canon Robert J. McCloskey
 Coyle E. Moore, Ph.D.
 Paul W. Penningroth, Ph.D.

The purpose of the Council is to promote training of mental health personnel; to encourage research in mental health; to collect and prepare data on the needs for training and research in mental health; to encourage coordination of training and research activities to avoid unnecessary duplication.

"A big job with ambitious goals" is a phrase which well describes the work of Florida's year-old Council on Training and Research in Mental Health. Created by an Act of the Florida Legislature in 1955, the Council, a body of eleven professional and lay citizens serving without compensation, advises and consults with the State Board of Health on mental health matters. The latter agency administers the Council's funds. Although fundamentally concerned with the granting of training and research stipends and scholarships, for which a biennial appropriation of \$250,000 was made, the Council has not viewed its functions narrowly.

Its main concerns are admittedly long range. Appalling shortages of trained personnel in the fields of psychiatry, psychology, psychiatric nursing and psychiatric social work, have spurred this body to seek diligently for qualified applicants for internships and scholarships in these areas. Response has been good and a number of grants for advanced professional training have already been made. Those granted in 1956 are listed under "Scholarships" elsewhere in this volume. The Council has received no applications for the six stipends offered to third and fourth year students in clinical psychology.

Three training supervisors in clinical psychology have been employed:

Haim G. Ginott, Ed.D., located at Duval County Child Guidance Clinic.

Gerald A. Reynolds, Ph.D., located at Escambia County Child Guidance Clinic.

Murray J. Heiken, Ph.D., located at Dade County Child Guidance Clinic, in cooperation with Jackson Memorial Hospital.

Wholeheartedly adopting the premise that an all-out research attack on mental illness is an insistent must, the Council has made special effort to use wisely the small portion of the fund designated

for research. Already two promising projects have received support. Both of these are in the Miami area.

A survey of research potential in Florida organized cooperatively by the Southern Regional Education Board and the Council, and financed by Southern Regional Education Board funds, was made in 1956. Several excellent suggestions were made and suggested principles for the development of mental health research in Florida were laid down.

Recognizing the importance of training for professional people already in service, support has been given to a mental health training workshop for nurses. Skilled conference leadership successfully conveyed to the nurses in attendance effective ways of meeting the needs of the mentally ill and their families. Other such courses of study are planned for the future.

The group maintains informal contact with the Joint Interim Committee on Mental Health of the Florida Legislature, and has assisted the Governor's office and other state agencies on matters pertinent to mental health problems of the state. Thus the Council was consulted on matters concerning the proposed Northeast Florida Mental Hospital and the psychiatric floor of the new teaching hospital at the University of Florida Medical School.

The Council provided funds for the calling of a three-phase conference on school mental health. The Council felt that this was the best way in which to satisfy a request from the Governor's office for advice on the feasibility of establishing a program for Florida schools which would contribute significantly to the maintenance of good mental health in the population. To this end a series of working conferences were held, in which consultants on school guidance programs were brought from outside the state to meet with representatives of the State Department of Education, State Board of Health and other interested groups to study the advisability of an expansion of the guidance program in the schools of Florida.

These conferences resulted in suggestions for legislation to implement the already existing guidance program in the schools. This legislation would be sponsored by the State Department of Education.

(Note: For a copy of the Council's complete report, please write to the Florida Council on Training and Research in Mental Health, P. O. Box 210, Jacksonville, Florida.

BUREAU OF FINANCE AND ACCOUNTS

FRED B. RAGLAND, B.S.,
Director

During 1956 the activities of this bureau were numerous and varied. The processes of good administration, the fundamental principles of governmental accounting and the accepted patterns of administrative and management guidance, must be followed to carry out the business responsibilities of the agency. The 1955 legislature enacted several laws which assigned new public health responsibilities to the State Board of Health. The 1955 General Appropriations Act provided additional funds for the purpose of carrying out these responsibilities. The bureau assisted program and bureau directors in planning for maximum utilization of the funds provided.

One of the highlights of the activities of this bureau during 1956 was a study of the classification and compensation range of each merit system position in the agency. In March 1956 the State Merit System Council engaged Public Administration Service, of Chicago, to study and recommend a uniform classification, pay plan, and leave policy for the fifteen state departments presently operating under the State's Merit System. To provide the basic material for the independent study a detailed description of the duties performed by all non-exempted agency employees was prepared, including the personnel of county health departments. This material was collected in the Personnel Section of the bureau and subsequently transmitted to the survey staff of Public Administration Service. The recommended plan will be submitted to the State Personnel Board early in 1957 for final review and adoption.

In January 1956 administrative representatives from the Maryland Health Department visited the Bureau of Finance and Accounts. The purpose of their visit was to review administrative procedures and make a special study of Florida's method of allocating funds to county health departments. The practice of the exchange of ideas between states is an effective method of keeping pace with the trends in public health administration.

In February 1956 the services of the Public Health Advisor and three assistants were made available to the State Board of Health by the USPHS. With the aid of information furnished by the personnel of the bureau, this staff prepared process analyses, work distribution and flow charts, and a narrative report on their work simplification study of the procedures of this bureau. As a result some adjustments have been made in work assignments and work flow. The report is being used also as a guide for the study of other areas of operations.

A procedure has been devised whereby the administrative payrolls of the agency can be processed on punched card equipment.

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The inauguration of this procedure has been deferred, however, until the present reorganization study of Florida's merit system has been reviewed and adopted by the State Personnel Board.

During the year three parcels of land were purchased in Jacksonville. The acquisition of these properties gives the State Board of Health title to the entire block bounded by First, Pearl, Second and Julia Streets. An ordinance has been passed by the City Council of the City of Jacksonville authorizing the closure of West Second Street between Julia and Pearl Streets. When the Jacksonville City Commission concurs in this ordinance, the street area will be available for a building site and other uses. Plans for a new administration building to be situated on the above site are complete, except for mechanical drawings, and will be distributed to building contractors for competitive bids early in 1957. Plans have been approved for the construction of the Dade County Health Center and Laboratory in Miami with the combination of local, state and federal funds. Work on this building should begin during the early part of the coming year. A parcel of land adjacent to the Regional Laboratory in Tampa was purchased. The other project in the planning phase, for which funds have been appropriated, is the Regional Laboratory Building in Orlando.

Due to the inadequacy of housing facilities in Jacksonville it was necessary to rent additional storage space. This conveniently located space will solve the storage problem until the completion of the planned new building in Jacksonville.

FISCAL SECTION

The financial transactions of the State Board of Health for the fiscal year ended June 30, 1956 as reflected by the records of the bureau are presented in a condensed form in Tables 53, 54, and 55 and in Figure 10.

A detailed financial report for the fiscal year ended June 30, 1956, has been prepared and distributed to the Governor, members of the State Board of Health, and all bureaus, divisions and county health departments of the State Board of Health.

FINANCE AND ACCOUNTS 219

The funds received (or appropriated) for the fiscal year ended June 30, 1956, were from the following sources:

State Appropriations and Funds	\$ 6,458,542.50	56%
From Local Agencies for County Health Departments	3,200,212.72	28%
From Federal Grant-in-Aid	1,695,968.24	15%
From Private Contributions	113,074.93	1%
From Local Agencies for Hospital Services for the Indigent	25,205.60	-----
TOTAL	\$11,493,003.89	100%

Objectively, the operating and capital expenditures by the State Board of Health were for:

Personal Services (Salaries and Professional Fees)	\$ 5,322,220.23	57%
Contractual Services (Repairs, Utilities, Travel Expense, Cancer Program-Fees and Hospitalization)	1,211,675.41	13%
Commodities (Office, Medical, Laboratory, Mosquito Control, Educational) ..	1,170,341.31	12%
Current Charges (Rents, Insurance, Merit System Costs, Registrar Fees)	\$ 163,863.02	2%
Capital Outlays (Equipment and Fixed Assets)	333,745.92	4%
Grants to Counties and Mosquito Control Districts	1,080,095.41	12%
Miscellaneous (Educational Aids and Subsidies, and Revolving Fund)	42,000.00	-----
TOTAL	\$ 9,323,941.30	100%

In addition to funds reported in the annual financial report and summarized above, certain other funds and services were made available by the Public Health Service of the U. S. Department of Health, Education and Welfare to activities of the Board but were not paid directly to the State Board of Health. They include:

Value of Public Health Service personnel on loan to the Board in Preventable Disease Program	\$76,665.74
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Fiscal operation followed a budget plan of 117 departmental budgets. These budgets were occasionally revised to meet changing situations. The majority of the revisions involved county health department budgets primarily because the fiscal year of the county differs from the fiscal year of the state. At the time county health department budgets were initially prepared, it was not known exactly what local funds would be available in each instance. It was,

therefore, necessary to revise a number of the County Health Department budgets during the year after the availability of funds from county sources was determined.

PERSONNEL OFFICE

PAUL T. BAKER

During 1956 procurement of personnel continued in a very satisfactory manner. Most vacancies were filled promptly and difficulty was experienced only in a few classifications where suitable applicants were in unusually short supply. This shortage was felt principally in sanitary engineers, dentists and stenographers. The generous State Retirement Plan contributed considerably to the successful recruiting program and to retention of personnel after employment.

Fortunately the sub-tropical climate and other advantages of this state are attracting large numbers of new residents and our recruiting problems are considerably less difficult than is the case in many neighboring states.

1956 was marked by steady progress in the field of personnel administration. In conformity with established policy, continued steps were taken to strengthen the Merit System structure in the State Board of Health. Diligent attention was given to insure that all appointments and separations were made in accordance with existing Rules and Regulations.

Leave records were maintained and service ratings for all employees were obtained and recorded.

Records of in-service and post-graduate training of employees were maintained and the application of regulations governing such training was insured. All employees of the main office were encouraged by the Personnel Supervisor to discuss their employment problems, if any, with him. At the times prescribed for consideration by the State Board of Health of salary increases, full information concerning each employee was made available to the Board in order that all employees might be treated fairly and equitably.

The payrolls of all employees were prepared in the Personnel Office and forwarded to the State Comptroller where salary warrants were drawn.

All matters pertaining to the Retirement Plan were handled with all possible dispatch.

Prompt action was taken after each Merit System examination to regularize the Merit System status of each provisional employee. Employees were notified without delay upon attainment of permanent status.

Salary increases were given to most of the personnel during the year. These increases were predicated on the basis of merit. Working conditions were generally satisfactory and employee morale continued to be high.

At the end of the year sixty-six (66) of the state's sixty-seven counties had organized county health departments which were operating under the Merit System.

On December 31, 1956 there were 1584 State employees (including those in county health departments) and 17 Federal employees on loan to this agency. On December 31, 1955 there were 1478 state employees and 14 Federal employees.

During the year there were 488 employments and 382 separations, including part-time personnel. The principal reasons for separations include marriage, pregnancy, transfer of husbands from area, completion of projects for which employed and acceptance of more profitable employment elsewhere.

TABLE 52

NEW EMPLOYMENTS, SEPARATIONS, AND TURNOVER RATES BY CLASSIFICATION

Classification	New Employment	Separations	Turnover Rate*
Total	488	382	24.93%
Health Officers	20	21	32.81%
Sanitary Engineers	6	6	24.00%
Sanitarians	36	23	11.00%
PH Nurses	99	71	18.35%
Clerical	147	106	28.19%
Others	180	155	32.91%

* Turnover rate—separations divided by average number of employees.

On December 31, 1956 the Merit System status of the State Board of Health personnel was as follows:

Permanent and Probational	1262
Provisional	53
Temporary	0
Emergency	11
Exempt and Part-time	258
TOTAL	1584

During the year specifications were adopted for three new classifications: six specifications were revised; no classifications were abolished and no salary ranges were revised.

The State Legislature, at the 1955 session passed legislation providing for the reorganization of the Merit System, making it possible for any state agency to participate therein upon application of the governing body. During 1956 the Merit System Regulations were revised. Action was initiated to provide for a uniform classification and compensation plan, the reallocation of positions and a uniform leave policy. Final action had not been taken at the year end.

Post-graduate training on a stipend basis for one full academic year was successfully completed during 1956 by three health officers, four public health nurses and three sanitarians.

PURCHASING AND PROPERTY

G. WILSON BALTZELL

During 1956 the purchasing agent received 2611 requisitions for equipment and supplies from the various bureaus and departments, and 3126 purchase orders were issued totalling \$1,433,933.30. There were 151 more requisitions received in 1956 than in 1955, but 430 less purchase orders were issued. The value of 1956 purchase orders, however, was almost double that for the previous year.

Fire insurance on buildings and contents is carried in the State Fire Insurance Fund supervised by the State Fire Insurance Commissioner.

The State Board of Health carries automobile insurance on its fleet of passenger cars, trucks, trailers, busses, etc. This coverage includes Public Liability, Property Damage, Fire, Theft and Comprehensive. During the year the insurance company was called upon to pay only three liability claims amounting to \$684.89. Fire losses were settled for \$1,004.44 and comprehensive losses (broken windows) \$28.90.

Scientific equipment is protected by a "Floater", or transportation policy while being moved from place to place throughout the state. The cost of repairing damaged generators that furnish electric current for tuberculosis X-ray units amounted to \$375.44 during the year.

The State Board of Health acts as self-insurer for collision coverage, and in 1956 damages to our cars which we assumed, amounted to \$768.13. This amount was less than last year, and still much less than it would cost to carry collision coverage. Damages to State Board of Health cars caused by others were settled by their insurance companies for \$417.64.

Insurance on boilers and heating equipment is carried in a master

boiler policy supervised in the office of the State Fire Insurance Commissioner.

Movable property located in the central offices in Jacksonville has been inventoried and recorded on punched cards. Approximately 5000 items are represented. Departmental inventories have been prepared and distributed to the accountable custodian for verification and signature. Cards have been punched and new numbers assigned to the property located in the Entomological Research Center at Vero Beach. Procedures for inventories of property in the county health departments and branch laboratories have been set up and work will begin on these projects in the very near future.

BUILDINGS AND GROUNDS

The building superintendent has the responsibility for the maintenance of buildings and grounds in the Jacksonville area. He also supervises the maintenance of automotive vehicles.

During the year a temporary warehouse was demolished and the contents moved to rented space at 1234 Pearl Street, conveniently located to the central office.

DUPLICATING

The duplicating department continued to serve the various departments economically and expeditiously. This department turns out a large volume of work resulting in worthwhile savings to the agency.

TABLE 53

**SUMMARY OF RECEIPTS AND DISBURSEMENTS AND BALANCES
FOR THE FISCAL YEAR ENDED JUNE 30, 1956**

RECEIPTS

FROM STATE FUNDS

From State Appropriations-Operations:	
General Administration	\$ 1,500,508.00
Mental Health	160,172.00
Cancer Control	260,000.00
Consolidated Mosquito Control	1,734,329.00
County Health Units	1,250,000.00
Medical Students Scholarships	10,000.00
Dental Students Scholarships	10,000.00
Hospital Service for the Indigent	500,000.00
Mental Health Council	125,000.00
Emergency Fund-TB Case Finding	84,000.00
From State Appropriations-Buildings & Improvements:	
Purchase of Land - Jacksonville	60,000.00
Dade County Health Center and Laboratory	125,000.00
Administration Building - Jacksonville	450,000.00
Purchase of Land - Regional Laboratory, Tampa	25,000.00
Orange County Health Center and Laboratory	75,000.00
Other:	
State Board of Health Trust Fund	188.50
Medical Laboratory Control	780.00
Bedding Inspection Administration	70,145.00
Advisory Hospital Council	250.00
Drug Store Inspections	15,670.00
State Revolving Funds:	
State Health Officer	2,500.00

TOTAL STATE FUNDS \$ 6,458,542.50

FROM FEDERAL GRANT-IN-AID

Public Health Service:	
General Health	\$ 330,657.00
Venereal Disease	83,374.35
Tuberculosis Control	81,023.00
Heart Disease	24,967.00
Cancer Control	49,690.00
Mental Health	62,673.00
U. S. Polio Fund - Program Costs	112,838.00
U. S. Polio Fund - Polio Vaccine	664,189.00
Children's Bureau:	
Maternal and Child Health	286,556.89

TOTAL FEDERAL GRANT-IN-AID \$ 1,695,968.24

FROM OTHER CONTRIBUTIONS

Grants and Donations	\$ 113,074.93
FROM LOCAL AGENCIES FOR COUNTY HEALTH UNITS	\$ 3,200,212.72
FROM LOCAL AGENCIES FOR HOSPITAL SERVICE FOR THE INDIGENT	\$ 25,205.50
Total Receipts and Balances	\$11,493,003.89
Balances July 1, 1955	1,939,450.50
Total Receipts and Balances	\$13,432,454.39

DISBURSEMENTS

OPERATING EXPENSE

Personal Services:	
Salaries	\$ 5,242,779.31
Professional Fees and Consultant Services	79,440.92
Contractual Services:	
Travel Expense, including subsistence and Lodging	596,532.50
Communication and Transportation of Things	134,830.73
Utilities	39,384.69
Repairs and Maintenance	38,295.51
General Printing and Reproduction Services	33,040.95
Subsistence, Care and Support of Persons	297,120.79
Other Contractual Services	72,470.24
Commodities:	
Bedding, Clothing, Linens and Other Textile Products	640.40
Building and Construction Materials and Supplies	9,162.73
Coal, Fuel Oil and Other Heating Supplies	10,474.86
Educational, Medical, Scientific and Agricultural Materials and Supplies	963,918.62
Maintenance Materials and Supplies (Janitorial, etc.)	41,148.61
Motor Fuels and Lubricants	44,476.15
Office Materials and Supplies	94,940.86
Office Materials and Supplies	5,579.08
Current Charges:	
Insurance and Surety Bonds	34,373.18
Rental of Buildings and Equipment	68,210.77
Other Current Charges and Obligations	42,144.46
Merit System	19,134.61
Total Operating Expenses	\$ 7,868,099.97

CAPITAL EXPENSES

Books	\$ 5,476.98
Buildings and Fixed Equipment	44,471.58
Educational, Medical, Scientific and Agricultural Equipment	69,536.90
Motor Vehicles - Passenger	59,744.94
Motor Vehicles - Other	10,268.30
Office Furniture and Equipment	73,603.83
Land	68,781.76
Other Structures and Improvements	616.61
Other Capital Outlay	1,245.02
Total Capital Expenses	\$ 333,745.92
TOTAL OPERATING AND CAPITAL EXPENSES	\$ 8,201,845.89
Grants to Counties and Mosquito Control Districts	\$ 1,080,095.41
Other Educational Aids and Subsidies	39,500.00
Revolving Fund - State Board of Health	2,500.00
TOTAL PROGRAM EXPENSES	\$ 9,323,941.30

NON-OPERATING DISBURSEMENTS

Comptroller's 3% Fee Collection Deduction for Medical Laboratory, Bedding Inspection Administration, Advisory Hospital Council, and Drug Store Inspection	\$ 2,037.90
Bedding Inspection Administration — Refunds for Stamps Collected	40.00
Grants and Donations — Refunds of Unused Portion of Grants to National Foundation of Infantile Paralysis, Inc.	4,349.55
Refund of Local Contribution	100.00
TOTAL NON OPERATING DISBURSEMENTS	\$ 6,527.45
TOTAL DISBURSEMENTS	\$ 9,330,468.75
BALANCE JUNE 30, 1956	4,101,985.64
TOTAL DISBURSEMENTS AND BALANCES	\$13,432,454.39

TABLE 54
SCHEDULE OF EXPENSES
BY PUBLIC HEALTH PROGRAM ACTIVITY

Health Services to mothers, infants, preschool and school children	\$ 1,840,428.00
Statewide Venereal Disease Control, Diagnosis and Referral of Infectious Venereal Disease Patients to Treatment Clinics	
Also Operation of Clinics	699,774.00
Mosquito and Pest Control Programs, Including Pest Control Law Enforcement	2,001,400.20
Statewide Sanitary Engineering and Environmental Sanitation	869,470.80
Statewide Tuberculosis Control, X-Ray Survey and Follow-up Work	724,009.00
Statewide Cancer Control Program	302,233.74
Mental Health Program	348,320.00
Statewide Narcotics, Drug, Medical Practice Law Enforcement	92,391.00
Heart Disease Program	178,178.00
Industrial Hygiene Program	21,566.88
Building Construction — Including Purchase of Land	111,138.77
Polio Program	759,271.10
Other Health Programs and Administration	\$ 1,375,759.81
TOTAL EXPENSES	\$ 9,323,941.30

SCHEDULE OF EXPENSES BY FUNCTIONAL ACTIVITY	
General Administration and Miscellaneous Training	\$ 472,929.89
Vital Statistics	197,820.35
Health Information	62,251.66
Narcotic Enforcement	69,369.05
Sanitary Engineering	225,346.80
Entomology and Mosquito Control	1,571,984.20
Laboratories	460,438.94
Tuberculosis Control	146,844.78
Preventable Diseases (excluding Tuberculosis)	204,195.59
Chronic Diseases	461,239.58
Maternal and Child Health	140,220.55
Local Health Service	146,725.82
Building Construction, Including Purchase of Land	111,138.77
Polio Program	759,271.10
County Health Units	4,294,164.22
TOTAL EXPENSES	\$ 9,323,941.30

SUMMARY OF TOTAL EXPENSES BY MAJOR FUNCTIONAL LEVEL

State Level — Organizational Units	
State Funds	\$ 1,714,772.58
Federal Funds	487,161.60
Private Funds	11,707.85
	\$ 2,213,642.03
State Level — Special Services	
State Funds	\$ 1,906,135.89
Federal Funds	909,999.16
	\$ 2,816,135.05
*County Health Units	
State Funds	\$ 1,300,823.75
Local Funds	2,774,207.05
Federal Funds	219,133.42
	\$ 4,294,164.22
GRAND TOTAL	\$ 9,323,941.30

- * Total County Health Units expenditures \$4,294,164.22 represents per capita expenditures of \$1.22 (43¢ State and Federal Funds and 79¢ Local Funds) based on population served by County Health Units of 3,518,700 (1956 Est. Census). For comparison with previous years see 1955 Annual Report, Table 3, Page 18; 1954 Annual Report, Table 3, Page 16; 1953 Annual Report, Table 3, Page 15; 1952 Annual Report, Table 2, Page 15; 1951 Annual Report, Table 2, Page 24.

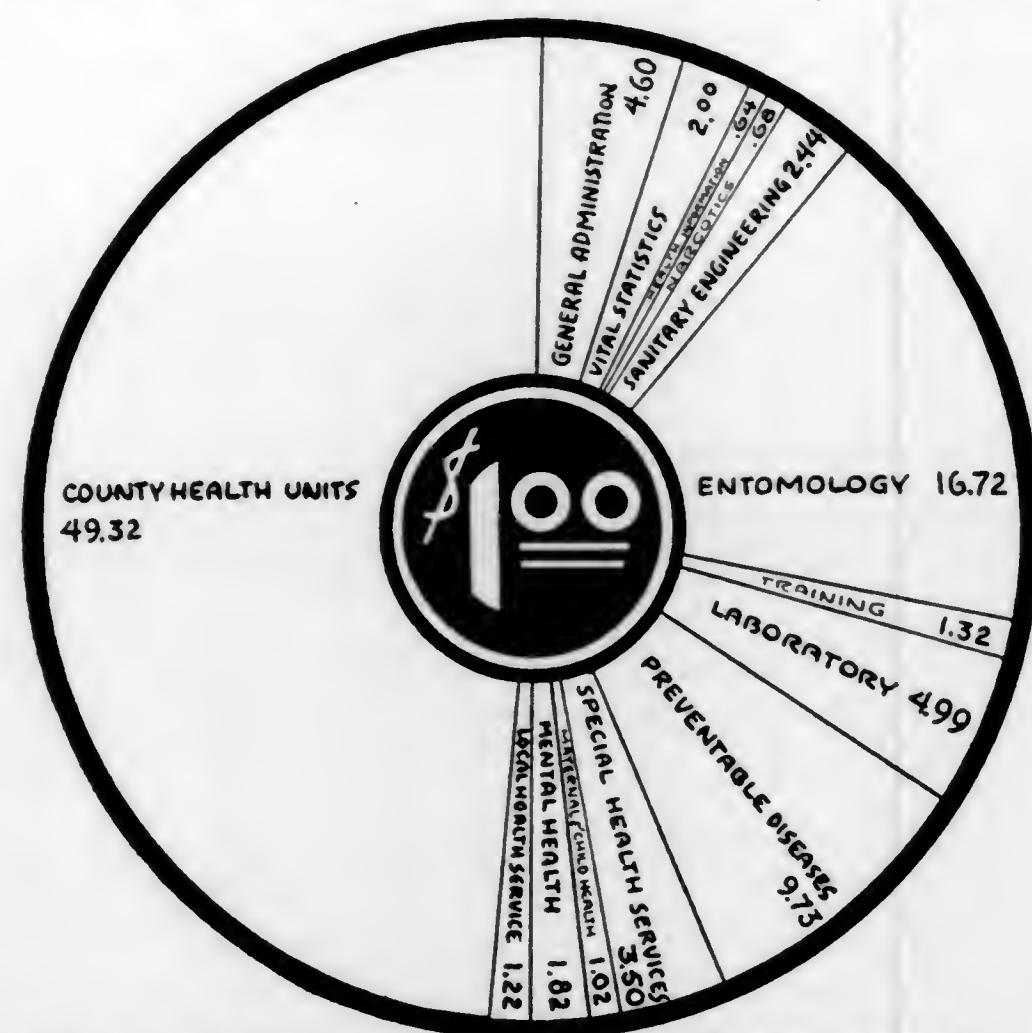
TABLE 55
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND FROM LOCAL SOURCES
FOR THE FISCAL YEAR ENDED JUNE 30, 1956

COUNTY	STATE BOARD OF HEALTH		LOCAL FUNDS				
	Total Funds	Total	State	State Mental Health	Federal	Total	Board of County Commissioners
ALACHUA	\$100,153.57	\$37,481.00	\$29,171.00	\$5,310.00	\$3,000.00	\$62,672.57	\$45,190.28
BAKER	16,129.06	9,473.06	8,015.00	1,058.06	400.00	6,656.00	6,320.75
BAY	68,862.14	33,036.04	22,360.00	10,676.04		35,826.10	35,241.85
BRADFORD	24,221.85	12,900.00	12,900.00			11,321.85	2,800.00
BREVARD	48,756.92	18,940.00	18,940.00			29,816.92	24,281.67
BROWARD	162,035.10	42,265.50	27,408.00	5,202.50	9,655.00	119,789.60	97,286.85
CHARLOTTE	15,582.75	8,417.00	8,417.00			7,145.75	7,100.00
CALHOUN	13,097.84	5,487.00	5,487.00			7,610.84	3,610.00
CHARLOTTE	13,808.21	7,186.00	7,186.00			6,622.21	3,837.71
CITRUS	28,910.37	16,497.00	16,497.00			12,413.37	9,898.37
CLAY	23,311.37	13,351.55	10,788.00			9,959.82	9,742.00
COLUMBIA	27,684.61	15,432.00	15,432.00	2,593.55		12,252.61	9,312.86
COUNTY HEALTH UNIT—							
STATE AT LARGE	44,880.00	44,880.00	44,880.00		50,483.17	677,041.24	635,689.25
DADE	841,552.93	164,511.69	110,109.00	3,919.52		6,761.37	4,897.37
DIXIE	19,135.37	12,374.00	8,774.00	3,600.00		5,254.56	4,630.06
DIXIE	10,136.56	4,882.00	4,882.00			92,752.76	75,432.67
DUVAL	143,297.40	50,344.64	31,411.00	1,530.00	17,613.64	125,536.50	61,559.15
FLAGLER	175,913.83	50,377.33	35,399.00	7,715.00	7,333.33	6,296.04	6,210.30
FRANKLIN	11,345.04	5,049.00	5,049.00			10,352.00	9,737.25
GADSDEN	16,932.00	6,580.00	6,580.00			20,318.62	13,999.92
GILCHRIST	42,163.62	21,845.00	21,845.00			5,077.18	2,276.12
GLADES	8,399.18	3,322.00	3,322.00			12,713.12	9,617.12
GULF	24,096.12	11,383.00	11,383.00			6,697.21	3,174.96
HAMILTON	15,568.21	8,869.00	8,869.00			9,542.66	8,973.16
HARDEE	21,688.66	12,146.00	12,146.00			5,714.35	5,657.85
HENDRY	12,724.35	7,010.00	7,010.00			5,209.50	2,530.00
HIGHLANDS	12,420.50	7,211.00	7,211.00			11,837.38	11,649.63
HILLSBOROUGH	27,048.38	15,211.00	15,211.00	10,410.00	46,355.02	453,752.28	349,945.47
HOLMES	546,961.30	93,209.02	36,444.00			8,263.95	4,373.20
INDIAN RIVER	19,943.95	11,680.00	11,680.00			13,317.65	8,910.12
JACKSON	25,051.65	11,734.00	11,734.00			20,437.64	16,588.14
JEFFERSON	43,502.64	23,035.00	23,035.00			6,562.00	3,200.00
TOTALS	15,813.00	9,251.00	9,251.00				

TABLE 55 (continued)
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND FROM LOCAL SOURCES
FOR THE FISCAL YEAR ENDED JUNE 30, 1956

COUNTY	STATE BOARD OF HEALTH		LOCAL FUNDS				
	Total Funds	Total	State	State Mental Health	Federal	Total	Board of County Commissioners
LAFAYETTE	\$9,801.27	\$4,776.00	\$4,776.00			\$5,025.27	\$3,181.26
LAKE	75,038.82	30,093.00	30,093.00			44,945.82	42,577.32
LEE	46,259.64	23,357.00	23,357.00			22,902.64	21,644.89
LEON	101,908.65	43,652.68	32,988.00		\$10,664.68	58,255.97	47,537.53
LEVY	22,181.42	12,288.00	12,288.00			9,893.42	5,731.92
LIBERTY	10,763.84	4,417.00	4,417.00			6,346.84	3,788.59
MADISON	21,341.50	11,576.00	11,576.00			9,765.50	6,150.00
MANATEE	60,739.40	23,477.84	21,592.00	1,885.64		37,261.76	35,368.86
MARION	54,881.67	25,540.00	25,540.00			29,341.67	19,327.17
MARTIN	19,323.72	10,301.00	10,301.00			9,022.72	8,199.99
MONROE	52,527.58	22,672.00	22,672.00			29,855.58	16,814.61
NASSAU	34,513.64	17,231.00	17,231.00			17,282.64	12,119.89
OKALOOSA	37,695.55	19,395.00	19,395.00			18,300.55	13,647.80
OKECHOBEE	12,296.42	5,116.00	5,116.00			7,180.42	6,834.83
ORANGE	163,888.13	51,076.25	38,265.00	2,802.00	10,009.25	112,821.88	83,811.63
OSCEOLA	21,830.02	12,741.00	12,741.00			9,089.02	6,000.00
PALM BEACH	231,733.71	62,852.00	41,777.00	9,290.00	11,785.00	168,881.71	90,284.00
PASCO	22,654.50	13,803.00	13,803.00			8,851.50	4,000.00
PINELLAS	402,893.28	81,535.00	44,245.00	1,470.00	35,820.00	321,358.28	261,200.07
POLK	225,321.03	48,794.80	37,133.00	1,580.00	10,081.80	176,526.23	167,241.48
PUTNAM	33,245.50	16,669.00	16,669.00			16,576.50	15,374.00
ST. LUCIE	33,930.72	20,079.66	16,333.00	3,746.66		13,851.06	12,943.56
SANTA ROSA	24,181.50	14,020.00	14,020.00			10,161.50	7,200.00
SARASOTA	68,251.97	32,618.53	28,686.00	1,300.00	2,632.53	35,633.44	26,887.13
SEMINOLE	31,957.75	18,009.00	18,009.00			13,948.75	8,000.00
SUMTER	17,009.53	9,696.00	9,696.00			7,313.53	3,480.00
SUWANNEE	25,104.46	13,181.00	13,181.00			11,923.46	10,853.08
TAYLOR	17,998.25	9,661.00	9,661.00			8,337.25	7,500.00
UNION	13,389.50	7,858.00	7,858.00			5,531.50	5,500.00
VOLUSIA	171,553.75	53,418.00	42,243.00	7,875.00	3,300.00	118,135.75	99,000.00
WAKULLA	11,116.25	6,093.00	6,093.00			5,023.25	5,000.00
WALTON	24,458.25	13,429.00	13,429.00			11,029.25	4,800.00
WASHINGTON	21,199.54	11,205.00	11,205.00			9,994.54	5,789.79
TOTALS	\$4,751,300.11	\$1,551,087.39	\$1,250,000.00	\$81,953.97	\$219,133.42	\$3,200,212.72	\$2,563,558.01
						\$192,612.54	\$151,500.90
							\$292,541.27

PROPOSED BUDGET FOR FLORIDA STATE BOARD OF HEALTH DOLLAR FOR 1957



GENERAL ADMINISTRATION	\$477,213	4.60
VITAL STATISTICS	207,200	2.00
HEALTH INFORMATION	66,200	.64
NARCOTICS	70,800	.68
SANITARY ENGINEERING	253,000	2.44
ENTOMOLOGY	1,734,329	16.72
TRAINING	136,540	1.32
LABORATORY	517,678	4.99
PREVENTABLE DISEASES	1,009,641	9.73
SPECIAL HEALTH SERVICES	363,546	3.50
MATERNAL & CHILD HEALTH	105,900	1.02
MENTAL HEALTH	188,720	1.82
LOCAL HEALTH SERVICES	126,100	1.22
COUNTY HEALTH SERVICES	5,116,117	49.32
Total	\$10,372,984	ONE DOLLAR

 DISTRIBUTION OF PERSONNEL — STATE BOARD OF HEALTH (OTHER THAN COUNTY HEALTH DEPARTMENTS)
DECEMBER 31, 1956

Bureau or Division	Physicians	Nurses	Dentists	Sanitary Engineers	Sanitarians	Laboratory Personnel (Professional and Technical)	Health Educators	Nutritionists	Statisticians	Clerical, Administrative and Fiscal	Maintenance and Custodial Workers	Other	Part-Time (All)	Federal Employees	Total
Administration—SHO	2		1				1		1	1		3			12
Dental Health															3
Finance and Accounts															8
Health Information															28
{ Fiscal Personnel															12
{ Purchasing and Property															12
{ Total															24
Laboratories															48
{ Jacksonville															13
{ Miami															13
{ Orlando															66
{ Pensacola															18
{ Tallahassee															7
{ Tampa															6
{ West Palm Beach															6
{ Total															128
Local Health Service															5
{ Bureau PH Nursing	2(a)	6													8
{ Field Advisory Staff and Inservice Training		1													9
{ Total		7													22
Maternal and Child Health															11
Mental Health															12
Narcotics															10
Preventable Diseases															6
{ Bureau Industrial Hygiene	2	1													3
{ Tuberculosis Control	1														21
{ Venereal Disease Control	1														22
{ Veterinary Public Health	4														26
{ Total															58
Sanitary Engineering															43
{ Bureau and Hospitals and Nursing															5
{ Homes	1														9
{ Chronic Diseases															5
{ Nutrition															19
{ Total															59
Special Health Services															53
Entomology															17
Vital Statistics															491
Grand Total	12	10	1	18	13	76	9	4	4	165	67	84	11	17	491

(a) One on Academic Leave

TABLE 57
DISTRIBUTION OF PERSONNEL IN COUNTY HEALTH
DEPARTMENTS — DECEMBER 31, 1956

COUNTY	Physicians	Nurses	Dentists	Sanitary Engineers	Sanitarians	Laboratory Personnel (Professional and Technical)	Health Educators	Nutritionists	Statisticians	Clerical, Administrative and Fiscal	Maintenance and Custodial Workers	Other	Part Time (All)	Federal	Total
Alachua	1	9			4				4	3	1	4			26
Baker		1			1				1		1	1			4
Bay	1	5			4				2		1	1			14
Bradford		2			1				1		1	1			5
Brevard	1*	4			2				1		1	4			13
Broward	1	16		1	8				9		1	2			42
Calhoun		1			1				1						3
Charlotte		1			1				1						3
Citrus	1*	1			1				1						4
Clay	1*	3			2				1			1			8
Collier		2			2				1			1			7
Columbia	1*	2			2				1			1			7
Dade	5	79		2	41	1	1		38	5	5	11			188
DeSoto		1			1				1			1			4
Dixie		1			5				6	3	6	4			27
Duval	1	12			7				11	1	3	3			39
Escambia	2	12			1				1						3
Flagler		1			1				1						3
Franklin	1*	1			1				1			1			5
Gadsden	1*	5			2				2						11
Gilchrist		1													1
Glades									1						1
Gulf		2			1				1						5
Hamilton		1			1				1		1				4
Hardee	1*	2			1				1						5
Hendry		1			1				1						3
Hernando		1			1				1						2
Highlands	1*	2			2				1						7
Hillsborough	6	37		2	14				27	15	22	8			131
Holmes		2			1				1			1			5
Indian River		3			1				1						6
Jackson	1*	4			2				2	1					10
Jefferson		1			1				1						4
Lafayette		1			1				1						3
Lake	1	4			3				2						11
Lee	1*	5			2				2						11
Leon	1	5			3				7	3	4	2			25
Levy		2			1				1			1			5
Liberty		1			1				1						2
Madison		2			1				2						5
Manatee	2(a)	5			3			1	4		2	1			18
Marion	1	4			2				2		1	2			12
Martin		2			1				1						4
Monroe		4			3				3	3	1	2			16
Nassau	1*	3			1				1		1				7
Okaloosa	2*(a)	3			2				2						9
Okeechobee		1			1				1						2
Orange	1	13	1		6				11			4	7		43
Osceola		2			2				1			1			6
Palm Beach	1	18	1	1	10				11	3	6	4			55
Pasco	1*	2			1				1						5
Pinellas	5(a)	30	1	1	17	1	1		20	4	4	2			86
Polk	2	23	2		10				13		2	4			57
Putnam	1*	3			1				1						8
Santa Rosa		2			1				1			2			6
Sarasota	1	7			4				4						16
Seminole	1	3			2				1				2		9
St. Lucie	1*	2			3				2			1			10
Sumter		1			1				1						3
Suwannee	1*	3			1				1						6
Taylor		2			1				1						5
Union		1			1				1						3
Volusia	1	15			5	1			4	2	7	3			38
Wakulla		1			1				1						2
Walton	1*	3			1				1			1			7
Washington		2			1				1						5
Total	52	391	5	7	202	3	4		231	46	82	87			1110

*Serves two or more counties — See Roster of County Health Officers.
(a) One on Academic Leave.

TABLE 58
TERMINATIONS AND TURNOVER RATES BY CLASSIFICATION
FOR THE FLORIDA STATE BOARD OF HEALTH AND COUNTY
HEALTH UNITS, CALENDAR YEAR 1956
(FULL-TIME EMPLOYEES ONLY)

CLASSIFICATION	Total	SALARY									
		Under 150	150-199	200-249	250-299	300-399	400-499	500-599	600-699	700-799	800-Plus
TERMINATIONS - 1956											
Total - All Employees	329	16	90	71	74	46	9	8	6	5	4
Physicians	17							3	5	5	4
Sanitary Engineers	6					2	2	2			
Sanitarians	22				11	11					
Public Health Nurses	63			2	45	15	1				
Prof. Laboratory Workers	10			3	3	3		1			
Clerical, Admin. & Fiscal	104		48	52	4						
All Others	107	16	42	14	11	15	6	2	1		
TURNOVER RATE - (ANNUAL PERCENTAGE)											
Total - All Employees	23.0	61.5	51.7	29.1	19.6	11.8	9.6	20.5	25.0	20.8	10.8
Physicians	27.4							60.0	55.6	31.2	11.8
Sanitary Engineers	23.1					100.0	25.0	25.0			
Sanitarians	10.6				28.9	8.5					
Public Health Nurses	16.1			15.4	20.5	10.5	8.3				
Prof. Laboratory Workers	12.8			18.8	13.0	12.5		16.7			
Clerical, Admin. & Fiscal	27.8		51.6	30.6	6.3						
All Others	36.6	61.5	53.2	32.6	33.3	28.3	20.0	14.3	12.5		